

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

CHEVRON MINING,

Plaintiff

vs.

No. 1:13-CV-00328 PJK/JFR

UNITED STATES OF AMERICA,
UNITED STATES DEPARTMENT OF THE INTERIOR,
UNITED STATES DEPARTMENT OF AGRICULTURE,

Defendants.

TRANSCRIPT OF PROCEEDINGS

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BEFORE: HONORABLE JUDGE PAUL KELLY
UNITED STATES 10TH CIRCUIT JUDGE

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1 THE COURT: Good morning, you may be
2 seated.

3 Where is our witness?

4 MR. TODD: Dr. Rigby is back there, Your
5 Honor. I think we have one thing to take care of.

6 THE COURT: He is hiding back there?

7 MR. TODD: He will be called in a minute,
8 Your Honor. We have one other item to deal with
9 first, if that is okay.

10 MS. KIMBALL: Your Honor, we have not yet
11 moved to admit the deposition designations. We just
12 want to jointly move to admit the deposition
13 designations into the record.

14 THE COURT: All right.

15 MR. TODD: Chevron recalls Dr. Rigby.

16 THE COURT: Okay. You are still under
17 oath.

18 (Whereupon, the witness was previously
19 sworn.)

20 THE COURT: You may proceed.

21 MS. KIMBALL: Thank you, Your Honor. All
22 right. Can you hear me all right?

23 THE COURT: I'm sorry?

24 MS. KIMBALL: Can you hear me all right?

25 THE COURT: Go ahead.

1 CROSS-EXAMINATION (Continued)

2 BY MS. KIMBALL:

3 Q. Dr. Rigby, Chevron conducted a substantial
4 amount of exploration after the end of the DMEA
5 contract and before developing the open pit,
6 correct?

7 A. Certainly did.

8 Q. And no Federal employee told Chevron how
9 to conduct its privately-financed exploration,
10 correct?

11 A. Not that I am aware of.

12 Q. Chevron did not consult with DMEA or any
13 other Federal agency when developing the open pit,
14 correct?

15 A. I am not in a position to really say. I
16 don't know what they did.

17 Q. All right. Let's turn to your opinions
18 regarding the Red River plan.

19 You testified that Chevron had an idea to
20 dump its waste rock on top of the state highway and
21 river in the Red River Canyon, correct?

22 A. I did.

23 Q. And the highway we are talking about is
24 State Highway 38, correct?

25 A. It is.

1 Q. And the river is the Red River, correct?

2 A. Yes.

3 MS. KIMBALL: Let's pull up U.S. Demo 03.

4 Q. (By Ms. Kimball) Do you recognize this
5 image as the image of the mine as it is today?

6 A. I believe so, yes.

7 Q. And can you just identify on this drawing
8 where the Red River fill plan would be.

9 So it would run the entire length from
10 Columbine Canyon down to the mill facility, correct?

11 A. What was the question?

12 Q. Your plan would run from Columbine Canyon
13 down to the mill facility?

14 A. Not necessarily. That is the route, the
15 relevant place. You see the front piles on the
16 right-hand side there, but my own belief, the
17 designs, the concepts that we came up with, it was
18 never defined how long that tunnel, culvert would
19 need to be, there is so much flexibility in the
20 design.

21 You know, maybe I think I said in my
22 report a half a mile. It could have been a quarter
23 of a mile, it could have been -- you know, the
24 minimum would have been 150 feet if you just needed
25 a bridge to cross the 38 and the Red River. So we

1 give examples of what it would look like and some
2 alternative lengths, but that was never finalized
3 because the concept was basically killed.

4 Q. And so you have never actually seen any
5 engineering plans for what they were planning to do,
6 correct?

7 A. I heard yesterday that some did exist but,
8 unfortunately, I haven't seen any other than the
9 ones that we prepared.

10 Q. You have never seen anything that Molycorp
11 prepared?

12 A. No.

13 Q. And you have never seen any evidence that
14 they presented any plans to the Forest Service?

15 A. Not that I am aware of.

16 Q. And how tall would the valley fill have
17 needed to have been?

18 A. Again, if you read my report, I do discuss
19 the flexibility that one had. And in terms of, I
20 mean, we have a volume that we need to dispose of,
21 maybe 350 million tons or thereabouts, but you have
22 got so many different dimensions. You have got both
23 sides of the valley, and therefore -- and the
24 dimensions that you could use with that volume and
25 that tonnage really would depend upon -- because I

1 believe in progressive restoration, you would
2 basically build the waste-rock dumps with a view to
3 a final landfall and a final restored surface.

4 And therefore not having been finalized,
5 my point is you could have placed the waste-rock to
6 replicate the topography in the region so that
7 post-reclamation and restoration with trees, scrub,
8 et cetera, et cetera, you really wouldn't know that
9 that was actually waste-rock dump.

10 Q. And all of this is your, you're theorizing
11 about what could have happened, not anything that
12 Molycorp had actually planned. You have never seen
13 any plans that they --

14 THE COURT: He has already answered that
15 question.

16 Q (By Ms. Kimball) Okay. But you have never
17 seen anything from Molycorp that shows that they
18 were planning to do --

19 THE COURT: He already answered that
20 question, too. We are going to have to move this
21 along, so try not to repeat yourself.

22 MS. KIMBALL: Okay. I'm sorry.

23 Q (By Ms. Kimball) Chevron did not own the
24 land with the state highway on it, correct?

25 A. I don't believe so.

1 Q. The Forest Service owned that land and
2 New Mexico had an easement for that highway?

3 A. I believe so.

4 Q. And Chevron would have needed permission
5 from both the Forest Service and New Mexico in order
6 to tunnelize the highway?

7 MR. TODD: Objection, Your Honor, calls
8 for a legal conclusion. I don't know that
9 Dr. Rigby, is here as a -- well, he is not here as
10 an expert in land use law or state law.

11 THE COURT: He can say that.

12 A. Could you repeat the question then,
13 please.

14 Q (By Ms. Kimball) Would Chevron have needed
15 permission from the Forest Service and the State of
16 New Mexico to tunnelize the highway?

17 A. I don't know, but I would assume possibly,
18 yes.

19 Q. And Chevron did not own the river?

20 A. No.

21 Q. The State of New Mexico owned the river?

22 A. I believe.

23 Q. And so they also would have needed
24 permission from the State of New Mexico to tunnelize
25 the river?

1 A. I would assume so.

2 Q. And as we sit here today you have never
3 seen any evidence that they ever broached this issue
4 with the State of New Mexico?

5 A. I think, as I indicated earlier, the
6 project never advanced that far, unfortunately.

7 Q. But if they did not have permission to go
8 over the river, they never could have done this plan
9 either, correct?

10 A. I would have hoped so, yes.

11 Q. And the State of New Mexico had already
12 been concerned about the impact the mine was having
13 on the river, correct?

14 A. I am not sure.

15 MS. KIMBALL: Mr. Hambrick, could you pull
16 up CX209, which has previously been admitted?

17 THE COURT: What was that again?

18 MS. KIMBALL: CX209.

19 THE COURT: Okay.

20 Q. (BY Ms. Kimball) Dr. Rigby, this --

21 MR. TODD: Your Honor, objection.

22 THE COURT: State your objection.

23 MR. TODD: I am going to sit back down, if
24 that's okay, so you can hear me, Your Honor.

25 THE COURT: I can hardly understand you.

1 MR. TODD: I apologize for sitting. Your
2 Honor, I gave Ms. Kimball some leeway yesterday in
3 raising environmental issues. We do have a
4 stipulation dealing with environmental issues. This
5 is about the third or fourth time that she has asked
6 about this with this witness.

7 I object to this line of testimony. The
8 impact to the river has nothing to do with the
9 allocation issues, perspective issues before the
10 Court today. That is for the third phase.

11 THE COURT: Sustained.

12 MS. KIMBALL: Your Honor, if I may. I am
13 bringing this up only to point out the --

14 THE COURT: No. We have a stipulation. I
15 have got it right here, if you need a copy of it.

16 **Q (By Ms. Kimball) Dr. Rigby, you have never**
17 **seen any evidence that Molycorp had discussed the**
18 **impact that the Red River plan would have on the --**
19 **that the dump fill itself would have on the river?**

20 THE COURT: Counsel, we have been down
21 that road. Now I want you to move on.

22 **Q (By Ms. Kimball) Dr. Rigby, you opined**
23 **filling the river with waste-rock could have been an**
24 **economically superior option, correct?**

25 A. Yes.

1 Q. And you estimate that the Red River dump
2 idea would have cost approximately \$2.4 million,
3 correct?

4 A. An indicative cost, yes.

5 Q. And the land exchange cost Chevron
6 approximately \$85,000, correct?

7 A. I believe so.

8 Q. And your estimate for 2.4 million only
9 estimates the cost of the steel for the tunnel,
10 correct?

11 A. It was a cost of culverts based on a
12 quotation from an engineering company for a similar
13 structure which would have been used for another
14 internal waste dump on the erection site on the pit,
15 which is where they erected the shovels and that
16 would require access, maintenance of access for haul
17 trucks.

18 I thought that was a good indicator
19 because that dump would probably have been much
20 higher than what you envisioned in the Red River
21 Valley waste disposal concept.

22 Q. It was only for the steel and the
23 construction materials for the culverts themselves?

24 A. It was basically everything for the
25 culvert.

1 Q. Did it include the labor for the culvert?

2 A. I believe it was an all-in cost.

3 Q. And the haulage tunnel that you were
4 basing this on, that wasn't going to be over a
5 public highway, correct?

6 A. It was an internal access road used by
7 these enormous haul trucks.

8 Q. And a dry haulage culvert doesn't have to
9 accommodate vehicles traveling highways, correct?

10 A. Oh, yes, there are certain restrictions on
11 mines in terms of speed limits.

12 Q. Right. So there aren't the same -- they
13 are not traveling the same speed as you travel on
14 the highway, correct, as cars travel on the highway?

15 A. Well, I think and it is like my earlier
16 response because the concept was flatly refused by
17 the Forest Service, vigorously opposed, I think the
18 term was, that this detail was never really gotten
19 into. And I suspect if it had gone forward, there
20 would have been some additional speed restrictions
21 within the culvert of R38.

22 Q. You think the state highway tunnel would
23 have been reduced in speed?

24 A. I would say that would have been one
25 consideration.

1 Q. Okay. But you haven't seen anything from
2 Molycorp evidencing --

3 THE COURT: Counsel, he has already
4 testified he has seen nothing.

5 Q (By Ms. Kimball) You also opined that the
6 Red River plan was technically feasible. Dr. Rigby,
7 the tailings pipeline runs along the same route that
8 you had planned for the Red River fill plan,
9 correct?

10 A. It does indeed.

11 MS. KIMBALL: And, Mr. Hambrick, could you
12 pull up USX373, which has previously been admitted.

13 Q. (By Ms. Kimball) This shows the route of
14 the tailings pipeline, correct?

15 A. Yes, I believe so.

16 Q. It is running the full length of the mine?

17 MS. KIMBALL: I think there is an issue
18 with what documents are being pulled up. The Clerk
19 needs to switch the screen to show from the defense
20 exhibits.

21 Thank you.

22 Q (By Ms. Kimball) All right. This shows the
23 tailings pipeline that runs along the mine, correct?

24 A. Well, it runs along the southern boundary
25 of the mine, yes.

1 Q. It runs along the river and the highway
2 the entire length, right?

3 A. The logical place to locate it.

4 MS. KIMBALL: And if we could turn to
5 CX432.

6 Q. (By Ms. Kimball) This shows your three
7 markups of the potential valley fill idea, correct?

8 A. Those are three markups, just examples of
9 what it could look like, certainly not a
10 recommendation.

11 THE COURT: Let me interrupt you for a
12 minute. What has this got to do with anything that
13 we are dealing with today? Anything?

14 MS. KIMBALL: Well, Chevron has --

15 THE COURT: Well, they said that it never
16 got beyond the discussion and it was quenched right
17 away. So why do we even have to get into the
18 details? How is it relevant? If you can show me
19 relevance, you can go do it.

20 MS. KIMBALL: Well, Chevron has asserted
21 that the United States is liable for the rock piles
22 because they could have -- there was this
23 possibility --

24 THE COURT: That is hardly an issue.

25 MS. KIMBALL: Okay.

1 THE COURT: We are here to allocate based
2 upon the fact that the Government is deemed to be a
3 potentially responsible party by the Tenth Circuit.
4 And we have covered this and covered it and covered
5 it. You could cover the river with it, and so I
6 would like to move on or we are going to be here for
7 months.

8 MS. KIMBALL: Thank you, Your Honor.

9 **Q (By Ms. Kimball) Dr. Rigby, regardless of**
10 **whether Chevron may have preferred an option other**
11 **than the waste-rock piles that it has already**
12 **created, they did, in fact, seek and obtain**
13 **ownership over their own waste-rock piles, correct?**

14 A. By way of the land exchange, yes.

15 **Q. And they have had exclusive ownership of**
16 **those waste-rock piles for the past 50 years,**
17 **correct?**

18 A. '74 to now, almost.

19 **Q. So about 50 years?**

20 A. Yes.

21 MS. KIMBALL: No further questions,
22 Your Honor.

23 THE COURT: You may redirect.

24

25

1 REDIRECT EXAMINATION

2 BY MR. TODD:

3 Q. Good morning, Dr. Rigby.

4 A. Good morning.

5 Q. Dr. Rigby, let me start where Ms. Kimball
6 started yesterday. You were asked some questions
7 about acid rock drainage and showed some pictures of
8 some yellow water and there was discussion of acid
9 rock drainage from there and the rock piles.

10 Do you recall those questions?

11 A. I do.

12 Q. What happens to all of the water that
13 comes off the rock piles or in either of those
14 pools?

15 A. It is basically collected, treated and
16 discharged.

17 Q. Now, is the mine the only place in the
18 valley where acid rock drainage occurs?

19 A. No, no.

20 Q. Where else does it occur?

21 A. Multiple hydrothermal alteration scars,
22 which as I mentioned yesterday, during rainfall
23 events, snow melt, et cetera, et cetera, creates
24 erosion flows, which basically flow down the steep
25 sides of the valley across the R38 and into the Red

1 River. So regular occurrence and has been forever.

2 Q. Have these been known to impact the road
3 and the river?

4 A. Absolutely.

5 Q. How so?

6 A. The deadly flows need to be cleared, so
7 the R38 is closed while the authorities clear the
8 debris, and it basically, because of the acid
9 generating nature of the material, it clearly
10 reduces the pH in the Red River and turns the Red
11 River red, plus turbidity.

12 Q. Now in the 1960s and 1970s when the
13 waste-rock piles were being created, are you aware
14 of the Government ever objecting to the waste-rock
15 piles as being a source of potential acid rock
16 drainage?

17 A. No.

18 Q. What is your understanding of what the
19 Forest Service issue was of the waste-rock piles?

20 A. I believe they viewed the waste-rock piles
21 favorably or positively because they reduced -- they
22 basically sealed existing hydrothermal scars in that
23 location and inhibited ARD from that material.

24 MR. TODD: Could we turn, Patty, please to
25 Chevron Exhibit 281, Page 5.

1 Let's go to the next page, please.

2 And highlight the third paragraph down
3 under Section 3, starting, "There are several."

4 Q. (By Mr. Todd) Dr. Rigby, this is the
5 Forest Service's environmental assessment and
6 justification of a land exchange, so justifying
7 giving land to Molycorp for waste rock disposal?

8 A. Yes.

9 Q. How did the Forest Service deal or view
10 the waste-rock piles here?

11 A. As I said, positively, but it reduced this
12 impact.

13 Q. Let's move on. You were asked lots of
14 questions about Molycorp's exploration program at
15 Questa in 1954 to 1956, so prior to the DMEA loan.

16 Do you recall that?

17 A. I do.

18 Q. Now the Government has asserted that
19 Molycorp in those years was using diamond drilling
20 to search for a low grade ore body. I take it the
21 answers on cross yesterday that you disagree with
22 both of propositions?

23 A. Correct.

24 Q. Let's start with drilling. The Government
25 on cross with both witnesses yesterday extolled

1 **Mr. John Schilling as an expert regarding the Questa**
2 **Mine in the 1950s.**

3 **Do you recall that?**

4 A. I do.

5 **Q. Do you agree with that assessment of**
6 **Mr. Schilling's expertise?**

7 A. A very, very capable exploration
8 geologist, yes.

9 **Q. And very familiar with the mine?**

10 A. Indeed.

11 MR. TODD: Let's pull up CX043, the 1956
12 Schilling report, please. Let's please turn to
13 Page 8 to 9 of the report, which is starting at
14 Page 22 of 104.

15 **Q. (By Mr. Todd) Dr. Rigby, how does**
16 **Mr. Schilling -- what exploration methods does**
17 **Mr. Schilling report as of 1956 that Molycorp was**
18 **using or not using at the Questa Mine?**

19 A. Basically underground exploration is
20 carried on by drifting and raising among the veins,
21 crosscutting where appropriate and, as he says,
22 diamond drilling is not used.

23 **Q. If diamond drilling had been used at**
24 **Questa?**

25 A. He would have known.

1 Q. He would have known?

2 A. Indeed.

3 MR. TODD: Let's pull up CX054.

4 Q. (By Mr. Todd) And this, Dr. Rigby, to
5 move us along, is the DMEA field team's Final Joint
6 Geological and Mine Drilling report.

7 A. Yes.

8 Q. What was the purpose of this document?

9 A. It was basically a first opinion on, or an
10 assessment of what Molycorp was proposing in support
11 of their application for a DMEA funding.

12 Q. And it is dated April 2, 1957.

13 Do you see that?

14 A. Yes.

15 Q. This is another contemporaneous account of
16 what was at the mine?

17 A. Indeed.

18 Q. Would the field team have inspected the
19 mine in person?

20 A. Yes.

21 Q. As well as reviewing documentation?

22 A. Correct.

23 Q. How comprehensive of a review in your
24 understanding would the field team had taken?

25 A. I think, as I alluded to yesterday, really

1 to me it was the expertise experience and capability
2 of the geologists and engineers within the DMEA, the
3 USGS and the Bureau of Mines that had tremendous, I
4 think, impact on this program because they took
5 their jobs very, very seriously and they did, to me,
6 a very detailed assessment of, A, what was being
7 proposed in the context of the geological
8 environment and the geological understanding which
9 existed at the time for the Questa Mine.

10 MR. TODD: Let's turn to Page 6, which is
11 16 of 54.

12 Q. (By Mr. Todd) Dr. Rigby, what exploration
13 methods did the DMEA field team in 1957 report were
14 used or not used at the Questa Mine?

15 A. Well, basically drifts and crosscuts. As
16 you can see, no diamond drilling has been done. And
17 basically assay records have not been kept or are
18 not available. And this is fundamental information
19 that you must have at a mine or certainly for
20 geological evaluation.

21 Q. You stressed the importance of sampling
22 and assaying yesterday in response to a question
23 from Ms. Kimball. What sorts of sampling was
24 Molycorp using pre-DMEA?

25 A. Because it was looking for high grade

1 veins, high grade veins are clearly visible once you
2 intersect them, and therefore they didn't really
3 need, you know, comprehensive sampling. But, and I
4 think what I was aware of was that apparently they
5 occasionally take grab samples from all cuts as they
6 are coming out of the mine.

7 Well, the problem of that is where exactly
8 did that sample come from? That sample is very good
9 for that sample in terms of the limited content, but
10 you don't know in three-dimensional space where it
11 actually came from, so it is not particularly
12 helpful.

13 **Q. You mentioned in your testimony some other**
14 **types of samples, knot samples and channel samples?**

15 A. Knot samples, channel samples and indeed
16 in diamond drilling you actually get a core, you
17 composite sections of that core, assay that core, so
18 you get a specific location and grade of that
19 sample, which is critical especially when you are
20 looking for low grade deposits.

21 **Q. Now the Government yesterday showed**
22 **USX003, which was an SEC filing from 1964, which**
23 **stated that there was diamond drilling and searching**
24 **for low grade ore as of 1954.**

25 **Based on the materials you have just seen**

1 that is not correct. If Molycorp was not using
2 exploratory drilling or representative sampling
3 prior to 1956, is it possible at all in your
4 experience and your expertise that that they were
5 searching for a low grade ore body?

6 A. I don't believe so, no.

7 Q. What sort of ore was Molycorp exploring
8 for prior to the DMEA program?

9 A. What they always explored for, which was
10 high grade vein system that would support their
11 operations as they had done since 1921.

12 MR. TODD: Let's pull up Mr. Schilling's
13 report again, CX43.

14 Q. (By Mr. Todd) The Government asserts that
15 Molycorp's DMEA application was driven in part by
16 Mr. Schilling's discussion of low grade ore at
17 Questa.

18 Do you agree with that?

19 A. Well, if it was I would have thought that
20 they would have appended Mr. Schilling's geological
21 assessment to their application, but they didn't.

22 Q. And during Mr. Dewey's testimony we heard
23 that Mr. Schilling did identify low grade
24 mineralization at Questa but concluded that what was
25 known at that point wasn't commercially viable.

1 **Do you recall that?**

2 A. That's right, they were not large enough.

3 MR. TODD: Let's turn to Page 92, please,
4 of this report.

5 **Q. (By Mr. Todd) Looking at the top of the**
6 **paragraph here, the highlighted text, what did**
7 **Mr. Schilling say had to happen first before one**
8 **could know whether there was commercially viable low**
9 **grade ore at Questa?**

10 A. It would need a detail study of grade and
11 tonnage to establish economic value like any mine.

12 **Q. And what would such a study entail?**

13 A. A large amount of drilling, bulk sampling,
14 as a precursor to scoping study, a pre-feasibility
15 study and a final feasibility study. A lot of hard
16 work to basically underwrite an investment and
17 development decision once you have demonstrated
18 economic value. Serious business it is.

19 **Q. Are you aware of any evidence suggesting**
20 **that any of that work had been done prior to the**
21 **DMEA's involvement?**

22 A. Not at all.

23 **Q. Who first suggested such a program?**

24 A. The DMEA.

25 **Q. Did Molycorp rely on Dr. Schilling's**

1 findings at all when it submitted its DMEA proposal?

2 A. I wasn't there, so I can't say, but there
3 is certainly nothing in the record to suggest that.

4 Q. Whose reports did Molycorp rely on and
5 attach to its application?

6 A. Two reports from Carpenter dated '54 and
7 '56.

8 Q. Now Mr. Carpenter's '56 report, at least,
9 does mention low grade mineralization at Questa.
10 Did he anywhere recommend a program to go delineate
11 it and explore for it?

12 A. Certainly not in that report.

13 Q. What did he recommend?

14 A. Continuing more of the same, looking for
15 the contact where they believe they may find high
16 grade vein systems.

17 Q. When you say the contact, can you
18 describe?

19 A. It just says basically the contact between
20 the volcanics and the country rock. You climb up
21 the volcanics where you end up with sheers and
22 fractures and so on, which hopefully hold some
23 mineralization.

24 Q. The Government also noted that
25 Mr. Carpenter in '56 noted diamond drilling. Did he

1 recommend that diamond core drilling be used to
2 search for low grade ore?

3 A. I don't believe so. That reference, which
4 I checked, I believe it is a quicker way of reaching
5 the contact and that was the purpose of that diamond
6 drilling reference.

7 Q. Okay. So to sum up, in December of 1956
8 when Molycorp applied for a loan, as the Government
9 demonstrated yesterday, Molycorp knew of low grade
10 mineralization at Questa, knew about diamond
11 drilling and knew that a study of grade and tonnage
12 using drilling and sampling could show if the ore's
13 commercial. Knowing all of that, what did Molycorp
14 propose to do to the DMEA?

15 A. More crosscutting and drifting which could
16 only be directed at exploring for more high grade
17 vein systems.

18 Q. Any drilling?

19 A. No.

20 Q. Any sampling?

21 A. No.

22 Q. During the negotiations over the contract,
23 as you testified a minute ago, it was the DMEA that
24 suggested using drilling and sampling and engaging
25 in the studies to look for low grade ore; is that

1 **right?**

2 A. Yes.

3 **Q. How would you characterize Molycorp's**
4 **reaction to the Government's proposal that it do**
5 **these things?**

6 A. If I can use my own words, I think they
7 were very negative. I mean, look, you are applying
8 to the DMEA for a loan to support exploration. You
9 don't want to get acrimonious, but they clearly
10 resisted the suggestion for diamond drilling,
11 systematic sampling and so on, and so forth.

12 That was one of the internal memos or
13 letters from the DMEA stated, you know, a lot of
14 what they were proposing was just not supportable.
15 It wasn't supported by geological knowledge or even
16 geological hypothesis. And as one of the references
17 was, it is more like prospecting than exploring and
18 certainly the DMEA wasn't set up to fund
19 prospecting.

20 **Q. Let me change gears now. You were asked a**
21 **lot of questions about the importance of the DMEA or**
22 **whether the DMEA was important to the development of**
23 **the Questa mine.**

24 **Do you recall those?**

25 A. I do.

1 Q. In your expert opinion, Dr. Rigby, could
2 Molycorp have discovered and delineated and
3 exploited the low grade ore body without the DMEA's
4 technical and financial involvement?

5 A. I think I said in my report, highly
6 unlikely.

7 Q. Let's talk about the execution of the
8 program. We have already talked about the contract
9 negotiation.

10 How valuable, in your opinion, was the
11 DMEA's technical assistance during the execution of
12 the program?

13 A. Very valuable. I mean, you know, they
14 would -- again in my report I think I used the term
15 hands-on. They were very much hands-on. This is an
16 important exploration program which had to be
17 executed as designed or as developed, but it needed
18 close oversight because the thing about an
19 exploration program is you don't do it with blinkers
20 on.

21 In other words, you embark on an
22 exploration program and you are learning from every
23 day. You are learning from every drill hole and you
24 think, oh, we don't know that. That now changes our
25 thinking. So we modify maybe the next drill hole to

1 maximize the benefit.

2 These are expensive drill holes, so you
3 are eking out every little bit of geological
4 knowledge to increase your understanding, and
5 modifying the program as you go. That is why it was
6 important for the oversight of highly experienced
7 people.

8 **Q. Did the DMEA provide any assistance or**
9 **guidance with respect to assaying?**

10 A. Yes, they did. I mean, that was agreed in
11 the report and specification for assaying composite
12 samples of core channel sampling along the drifts
13 and crosscuts. And the, I think two examples of
14 requests. I think one which was denied and the
15 other one which was approved.

16 One was a request to dispense with channel
17 sampling and just have an occasional wall sample.
18 The interpretation of the justification of the
19 request was, it was bogus and therefore it was
20 denied.

21 The other one that was approved was, you
22 know, because of the broken nature of a lot of the
23 ground, diamond drilling is difficult. And the
24 problem in diamond drilling in poor ground is that
25 core recovery is low. You know, and they had some

1 very, very low examples of core recovery.

2 The problem with low core recovery is did
3 we lose mineralization or did we lose waste. We
4 don't know. So the company requested that in
5 background, they be allowed to take sludge samples
6 which is basically the sludge that comes back out of
7 the hole from the drilling. It is not as good but
8 it is certainly better than nothing. That was
9 approved.

10 **Q. How about discovering errors in assaying?**

11 A. Apparently that did happen. I don't think
12 we ever got to the bottom of why, but partway
13 through the program, I think it was probably late
14 '58, maybe '59, it was discovered that for whatever
15 reason assay results have been overstated by a
16 factor of two and basically we had to be cut in half
17 50 percent of the reported value. That was a bit of
18 a blow.

19 **Q. Who discovered that error?**

20 A. I am not sure who actually discovered it.
21 I am not sure if it was DMEA. The fact is, it
22 doesn't matter, it happened.

23 **Q. The Government noted that Molycorp dug**
24 **more feet of tunnel on its own account than were dug**
25 **using DMEA funding.**

1 **Do you recall that?**

2 A. I do.

3 **Q. Have you reviewed a Molycorp tunnel on its**
4 **own?**

5 A. I have.

6 **Q. And where and what is your assessment of**
7 **that?**

8 A. I think there are two dimensions to what
9 they did themselves. One really resulted in
10 nothing, which was probably, I am guessing
11 4,000 feet or I think they did, in total, in
12 addition to what was done in the contract about
13 5,900 feet.

14 A lot of that was, I believe, to the
15 south, so the southwest and to the west looking for
16 high grade veins on their own, and I believe they
17 were unsuccessful.

18 But also some of that was, number one,
19 crosscut north, which was ultimately, let's say, and
20 certainly drifts off that crosscut part of the DMEA
21 program. I think that was -- that was good, let's
22 say good development to access an area which would
23 subsequently be proven to be from an exploration
24 perspective highly successful.

25 **Q. The discovery at the end that you**

1 mentioned there, was that Molycorp work or jointly
2 funded work?

3 A. Jointly funded work.

4 MR. TODD: Let's pull up CX107, which is
5 Molycorp's final report on the DMEA program. We saw
6 this yesterday. And let's turn to Page 4, which is
7 6 of 9 in the exhibit.

8 Q. (By Mr. Todd) At the bottom of the page
9 here, Dr. Rigby, it provides a summary of all of the
10 drifting, crosscutting and drilling that was done
11 during the program.

12 Do you see that?

13 A. I do.

14 Q. Did Molycorp do any drilling on its own
15 account?

16 A. I don't believe so.

17 Q. So if we include exploration by drilling,
18 who covered more square feet, Molycorp on its own or
19 the DMEA funded work?

20 A. Yeah, the DMEA funded work, clearly.

21 Q. There was 21,417 feet of drilling?

22 A. Yes.

23 Q. Thank you.

24 Let's move on to finances. Ms. Kimball
25 asked a lot of questions about bank borrowing and

1 capital raising yesterday.

2 Do you recall those questions?

3 A. I do.

4 Q. In your expert opinion, sir, would
5 Molycorp have been able to raise funds to explore
6 and develop the low grade ore body at Questa without
7 the DMEA's finance or involvement?

8 A. I don't believe so because providers of
9 finance have to have a reason, have to have -- when
10 you are applying for finance associated with mining,
11 you have to have a good argument. There has to be
12 an expectation of success, there has to be evidence.
13 The investors and banks and so on are no fools.
14 They have their own people with expertise in the
15 sector, and, you know, they will do thorough
16 assessment in their due diligence before providing
17 funding.

18 So you have to get your ducks in a row
19 before you approach financiers.

20 Q. Ms. Kimball noted that in '54 and '55,
21 Molycorp was able to raise about \$3 million.

22 Do you recall that?

23 A. I believe so.

24 Q. Would Molycorp's financial position in
25 1955 be relevant to whether it could explore for ore

1 **in 1957 at Questa?**

2 A. I think I mentioned that yesterday as
3 well, using, I think it was the prospectus for the
4 raising in '57 or there was a summary of basically
5 balance sheets for the previous five or six years.
6 The numbers range, basically what was available in
7 income plus or less special factors ranged from
8 about 500,000 to a million.

9 But that is not just Questa, that is
10 Molycorp Corporation with all of their other assets
11 as well. So there wasn't a lot left to support
12 excavation at Questa and certainly not for searching
13 for large low grade orbity.

14 **Q. And despite having raised the fund that**
15 **the Government pointed to, by the time of the DMEA**
16 **application in December of '56, did Molycorp have an**
17 **exploration planned at Questa?**

18 A. It states in the application that no
19 further exploration plans were available. They had
20 no plans for further exploration.

21 **Q. What impact did the signing of the DMEA**
22 **contract have on Molycorp's ability to raise funding**
23 **specifically for exploration of Questa in '57?**

24 A. As I said earlier, from an investor
25 perspective, you know, any good news can often be

1 leveraged and that's exactly what Molycorp did. In
2 1957, soon after their contract was signed, Molycorp
3 basically went to the market and raised funds and
4 attached the signed contract to that application.

5 **Q. And what impacts did the Government's**
6 **certification of a discovery at Questa in 1961 have**
7 **on Molycorp's ability to raise funds to explore and**
8 **delineate the ore body at Questa?**

9 A. Exactly the same, because now you have an
10 even stronger story to tell to the market, not just
11 that you have an exploration in place with the DMEA,
12 but now in '60 the certification, that that resulted
13 in a discovery of a large low grade ore body, which
14 would be in the whole objective of the exploration
15 program in the first place. And Molycorp quite
16 rightly got into that for the market in further
17 raising.

18 **Q. Last question on finances. The Government**
19 **has pointed out repeatedly, and correctly, that**
20 **Molycorp spent a lot more on its own account over**
21 **the years, so '57 to '64, a lot more than the DMEA**
22 **contributed to the exploration program. You agree**
23 **with that, right?**

24 A. You mean post-'60?

25 **Q. I am including the money that Molycorp**

1 **spent on its own '57 to '60.**

2 A. Yeah.

3 Q. **And then from '60 to '64 many millions**
4 **more, right?**

5 A. Yes.

6 Q. **Okay. Given that, and that's correct, but**
7 **given that, Dr. Rigby, what is your view of the role**
8 **of the DMEA's contribution to that initial**
9 **exploration program? How do you characterize those**
10 **funds?**

11 A. I would definitely characterize it as seed
12 capital or seed funding, which achieved its
13 objective. It identified the ore body and that is
14 the discovery holes which are so critical to any,
15 you know, any new deposit, any new project. That
16 really is the most important time in the life, but
17 that's when the real work starts.

18 And as I have mentioned earlier, you have
19 got a huge amount of work to do to raise the
20 knowledge base and the certainty to have pretty
21 definitive cash flow projections to support a
22 development decision and investment commitment.

23 Q. **Shifting gears again, Dr. Rigby, you were**
24 **asked a lot of questions yesterday about the**
25 **relationship between the DMEA exploration area**

1 underground and the open pit mine on the surface.

2 Do you recall that?

3 A. I do.

4 Q. And the suggestion was that these were
5 different, separate, unconnected.

6 Do you recall that?

7 A. I do.

8 MR. TODD: I will take a little time with
9 this, Your Honor. I think it is important to walk
10 through this carefully and geologically. I will do
11 this as quickly as I can.

12 THE COURT: Slow down just a little.

13 MR. TODD: Yes, Your Honor.

14 Q (By Mr. Todd) Dr. Rigby, let me start with
15 this. The three different mining operations at
16 Questa, two underground mines, one open pit, did
17 they develop different ore bodies?

18 A. Well, I don't believe so. It's basically
19 one contiguous continuous, but contiguous is a
20 geological term, large horseshoe-shaped ore body.

21 Q. There are lots of references in the
22 documents to the northeast zone and the southwest
23 zone. What does that mean? What are those?

24 A. Those are two zones within that large
25 horseshoe-shaped mineral, area of mineralization

1 which had elevated molybdenum grades, hence the
2 northeast and the southwest.

3 **Q. Did DMEA's funded exploration occur in**
4 **both?**

5 A. To a degree, yes.

6 **Q. And what exploration occurred in the**
7 **northeast zone?**

8 A. They, I think the emphasis shifted and
9 certainly towards the latter part of the contract,
10 the emphasis certainly focused on the northeast zone
11 as a result of, you know, of intersecting
12 mineralization.

13 **Q. We saw a minute ago yesterday that**
14 **Molycorp's final report to the DMEA.**

15 MR. TODD: Could we pull up CX107, again
16 and let's go to Page 9 of 9 and let's highlight the
17 three blocks, please.

18 **Q. (By Mr. Todd) Just to orient us,**
19 **Dr. Rigby, this was mentioned yesterday. What did**
20 **Molycorp report discovering through the DMEA funded**
21 **exploration?**

22 A. From the results of the exploration
23 analysis of the assays, the drill logs and so on,
24 they delineated three ore blocks, three distinct ore
25 blocks; Block 1, Block 2 and Block 3.

1 Block 3 was certainly in the northeast
2 zone.

3 **Q. And have you seen these plotted on maps?**

4 A. I have.

5 MR. TODD: Could we pull up CX211, please.

6 **Q. (By Mr. Todd) This is a mineral**
7 **examiner's report from 1969 prepared by a gentleman**
8 **named Harb Ashby; is that right?**

9 A. It is.

10 MR. TODD: Could we turn to Page 20 of 23,
11 please.

12 **Q. (By Mr. Todd) To move us along,**
13 **Dr. Rigby, do these maps plot where the three ore**
14 **blocks were?**

15 A. Yes, you can see them sort of dotted three
16 blocks.

17 **Q. And so that's the pixillation?**

18 A. The pixilation, that is the word I was
19 looking for.

20 **Q. And what, we see reference to Summit 4,**
21 **Lonesome Limited, Summit 5?**

22 A. Those are the claims.

23 **Q. Mining claims?**

24 A. Mining claims, yes.

25 **Q. On the surface?**

1 A. Patented claims on the surface.

2 **Q. And do you generally agree with the**
3 **location of these ore blocks?**

4 A. I do. I believe that is Block 3, isn't
5 it?

6 **Q. That's correct, sir.**

7 A. Yes.

8 **Q. Did the DMEA similarly prepare a final**
9 **report?**

10 A. Yes.

11 MR. TODD: Let's pull up CX108.

12 **Q. (By Mr. Todd) And is this the DMEA's**
13 **final report?**

14 A. It is.

15 MR. TODD: Could we go to Page 15 of 17,
16 please. And let's highlight the final paragraph or
17 blow it up, please.

18 **Q. (By Mr. Todd) What did the DMEA report**
19 **about the jointly-funded exploration discover?**

20 A. Well, you want me to read that?

21 **Q. You can paraphrase it.**

22 A. It is a large block. They concurred or
23 concluded that there was inferred reserves. Let's
24 not go into detail on that terminology, but they
25 believed about 2.5 billion tons of molybdenum

1 bearing rock containing better than .2 percent
2 molybdenite or molybdenum disulfide. Within that
3 huge mass, there were two blocks of commercial grade
4 .5 percent and within those they estimated
5 10 million tons each or thereabouts.

6 And again, Number 1 Crosscut North, which
7 is particularly relevant to Block 3.

8 **Q. And what does commercial grade mean?**

9 A. Well, commercial grade indicates that you
10 can mine it for a profit. It indicates, you know,
11 all of the evaluation work is to follow, but people
12 have a feel for what cutoff grade, which is the
13 breakeven grade above which you make money, below
14 which you lose money.

15 And hence they believed because of that
16 grade and I think ultimately the cutoff grade for
17 the open pit was about .15 percent, so if you are
18 mining .5 percent you are making a profit.

19 **Q. Dr. Rigby, is it possible to relate these**
20 **blocks and zones that we have seen in these reports**
21 **to mining claims and the location of the open pit on**
22 **the surface?**

23 A. Yes. By overlaying various plans.

24 **Q. I thought you would say that. I am going**
25 **to give you the materials to do that.**

1 A. Thank you.

2 MR. TODD: Could we pull up CX109, please.

3 Could we highlight the legends at the top and the
4 bottom so Dr. Rigby can see them.

5 A. That is better.

6 **Q. (By Mr. Todd) Could you tell the Court**
7 **what this map from 1960 depicts?**

8 A. Okay. It is a plan of the second tunnel
9 shelf level showing the exploration under the DMEA
10 contract. And I think the most important -- can you
11 just raise the top a little bit or pull the whole
12 thing down? Well, the most important --

13 **Q. Let me ask you this, Dr. Rigby. In the**
14 **top left do you see who prepared this map?**

15 A. USGS.

16 MR. TODD: We can get rid of the top call
17 out.

18 A. The most important thing there from a --
19 in terms of the exploration success is, number one,
20 Crosscut North, right in the middle of that figure,
21 and you can see it is going north. I don't want to
22 put my finger on it and draw on it because I will
23 ruin the diagram.

24 **Q. (By Mr. Todd) I can clear it if you would**
25 **like.**

1 A. Okay. Number 1 Crosscut North. What
2 happened with that and that was -- that was
3 developed by Molycorp on its own, I understand. And
4 probably the latter or the last 2 to 300 feet of
5 that Number 1 Crosscut North, that is less than
6 that, it is probably about there (indicating),
7 started to intercept pretty good grade, I think .5
8 on average.

9 There were assays of .7 percent moly, that
10 was, you know, very encouraging. And then within
11 the DMEA contract and they agreed that -- the DMEA
12 agreed that they would support as part of the
13 program Number 4 Drift West, which is to the left
14 shown in red and from a Number 3 Drift East, which
15 is also shown in red. That is 4 Drift West, 3 Drift
16 East.

17 **Q. And what is the implication of the tunnels**
18 **there in red on this map?**

19 A. They were basically jointly funded, DMEA
20 and Molycorp. And from Number 3 Drift East, drill
21 holes, diamond drills holes upwards were drilled and
22 from Number 4 Drift West, diamond drill holes
23 downwards were drilled and both intersected good
24 grade mineralization.

25 MR. TODD: Let me call up CX110, please.

1 Q. (By Mr. Todd) CX110, Dr. Rigby, is the
2 same as CX19 except there are some handwritten
3 notations.

4 Do you see those?

5 A. I do.

6 Q. What is your understanding of what those
7 depict?

8 A. I think those are handwritten notations
9 from Dr. Quivik, I believe, indicating the edges of
10 blocks.

11 Q. It says OME1 and OME2, and we will confirm
12 this later, but they represent the locations of the
13 two commercial ore blocks, okay?

14 A. Yeah.

15 Q. Is that your understanding?

16 A. Yes.

17 Q. And do you generally agree with the
18 location of those?

19 A. Without doing a detail analysis, they look
20 reasonable.

21 Q. One last document to show you for the
22 overlay.

23 MR. TODD: Could we pull up CX47, Page 13,
24 I think, it is.

25 Q. (By Mr. Todd) And, Dr. Rigby, this is a

1 **1958 map, and what does this combine?**

2 A. This is basically Molycorp's patented
3 claims at the time on surface.

4 **Q. What do you see overlaid on it in the**
5 **middle?**

6 A. Is that the -- I don't see it yet. Are we
7 overlaying the second?

8 **Q. It is difficult to see, but if you look in**
9 **the middle of this you will see the 1958 second**
10 **level tunnel --**

11 A. And can we see the ore blocks?

12 **Q. In a minute.**

13 A. Okay.

14 **Q. I know that you have looked at this not on**
15 **the screen. Is it your understanding that the**
16 **tunnel system in the middle of the picture is the**
17 **1958 second level --**

18 A. Yeah, because you basically superimpose
19 overlaying. So we have got the surface claim
20 locations, you have got the underground development
21 on the second tunnel, the second level tunnel shelf.

22 MR. TODD: Could we overlay CX47, CX110
23 and CX211. Can we zoom in on the area with the
24 pixillation and OME2.

25 **Q. (By Mr. Todd) And, Dr. Rigby, what does**

1 **this show you about the Molycorp reported ore blocks**
2 **and the DMEA reported ore zones?**

3 A. Well, I think we see three things. One
4 basically that successful exploration with the up
5 and downholes in the northeast zone from the
6 development and drilling.

7 Then the delineation and certification of
8 the ore blocks patented, the surface claims
9 specifically Summit 4, Summit 5 and Lonesome are all
10 pretty much coincident. It is the same, in the area
11 and the beauty -- and then they discovered this from
12 an analysis that Harb Ashby and mineral examination
13 report where he, when he looks at -- when he visited
14 the mine or the site and walked the surface,
15 identified where the claims were and then gave a
16 written description of activities that were
17 occurring at the time, and that was in 1969.

18 He refers to ore mining taking place on
19 the -- in the eastern part of Lonesome.

20 Stripping of overburden taking place for
21 the rest of Lonesome and stripping of overburden
22 taking place on Summit 4 and 5.

23 So that is telling me that this area that
24 you just circled was within the open pit.

25 **Q. Now, Ms. Kimball, yesterday, made the**

1 point that the DMEA workings, the discovery that we
2 just saw, was lower than the open pit?

3 A. Yes, which is why you used up-drill holes
4 drilled vertically upward.

5 Q. And your response several times was but it
6 is the same ore body?

7 A. The same ore body, absolutely.

8 Q. Yesterday you were very, very eager to
9 draw something on the white board over there?

10 A. I was.

11 Q. And you weren't allowed to, yesterday?

12 A. No.

13 Q. Okay.

14 MR. TODD: Your Honor, after testimony
15 yesterday, I didn't discuss Mr. Rigby's testimony
16 with him, but to save time today I didn't want him
17 drawing in court to move us along, so I invited him
18 to come early this morning and to draw whatever he
19 wanted. He has drawn something on that board, I
20 haven't seen it, I haven't discussed it with him,
21 but I would like to let him describe what he wanted
22 to say yesterday if that is okay?

23 THE COURT: Any objection?

24 MS. KIMBALL: No.

25 THE COURT: No objection, you may.

1 MR. TODD: May I approach, Your Honor?

2 A. So this is basically a plan view of the
3 northeast zone. This is -- we have already seen
4 these and the two previous diagrams. So this is the
5 Number 1 Crosscut North, that is Number 3 Drift
6 East, and this is the Number 4 Drift West.

7 And these are the locations, approximate
8 locations of the diamond drill holes. These were
9 drilled up and these were drilled down (indicating).
10 And I think the -- only one more?

11 The second diagram is a section looking
12 north. If you imagine the Number 1 Crosscut is
13 going in this direction due north and the last 2 to
14 300 feet intersected reasonably high grade
15 mineralization?

16 This is Number 3 Drift East, from which
17 drill holes were drilled upwards intersecting the
18 mineralization. This is, if you can imagine, this
19 is Number 4 Drift West, but it is sort of drilled
20 here, right? Downholes intersected the
21 mineralization. So this was the mineralization in
22 the northeast zone.

23 The geologists believe -- this is the
24 existing topography, Sulphur Gulch, and this is the
25 mountain. They believed originally the

1 mineralization went all the way but it was eroded
2 over geological time.

3 And to me this demonstrates more than
4 plans and so on, how awry the mineralization was
5 first discovered then delineated with exploration
6 program funded partly by the DMEA.

7 I think that puts it in simple terms and
8 the open pit ultimately, I mean it is not perfect in
9 terms of scaling and what have you, but the open pit
10 was around here (indicating).

11 MR. TODD: Your Honor, could we mark these
12 as Chevron Demonstrative 4 and 5?

13 THE COURT: Yes, please. Go ahead and
14 mark them on the paper.

15 (Exhibit marked, Chevron Demonstrative 4
16 and 5.)

17 **Q. (By Mr. Todd) Dr. Rigby, final question.**
18 **Once this discovery was made underground as part of**
19 **the DMEA program, what did Molycorp then do to get**
20 **to the open pit?**

21 A. Oh, well, that was in 1960 when the
22 discovery was certified and almost immediately they,
23 they started work.

24 '61 they raised additional funds and those
25 additional funds really was for further exploration

1 and definition drilling, infill drilling, and a huge
2 amount of work which culminated in the finalization
3 and publication of the feasibility study in 1964.

4 And that work, it was, it started with
5 exploration to get high resolution of the grade
6 distribution and better understanding of the edges
7 and the variability of the mineralization, but then
8 it shifted to some serious open pit design work and
9 then a huge amount of metallurgical test work.
10 Because, you know, they only had a 50-ton per day
11 mill. We ended up with eight, in '65, an 8,000-ton
12 per day operation.

13 And so they had to make sure that they had
14 done sufficient test work metallurgical test work on
15 both samples and pilot plant test work to ensure
16 that they had the right process flow sheet which
17 would optimize the recovery of the molybdenite
18 concentrate.

19 **Q. And in your expert opinion would any of**
20 **that have been done without the original DMEA**
21 **discovery?**

22 **A. In my expert opinion, absolutely not.**

23 **Q. Last topic, Dr. Rigby, the Red River**
24 **Valley fill concept. I am not going to ask you any**
25 **questions about the design or hypotheticals. His**

1 Honor has moved us on from that. Let me just ask
2 you this: The Government has suggested that
3 Molycorp was not really serious about the valley
4 fill concept, that it was just something that was
5 just tossed out casually at one meeting and wasn't
6 really a thing.

7 In your expert opinion, was this a serious
8 proposal addressing a serious need for Molycorp?

9 A. Undoubtedly, yes, it was a critical need,
10 not just serious, it was critical at that time.

11 Q. And what are your bases for believing
12 that?

13 A. Well, information that I have read but
14 also conversations that I have had with Dave
15 Shoemaker, Gene Dewey and John Landreth. And the
16 document in 1972 which looks forward of the next,
17 four, five, six years in terms of mine planning and
18 clearly can be seen on one of the pages in that
19 document, there is still talk about the bridge waste
20 dump, and the south side waste-rock piles, which is
21 on the south side of the river.

22 MR. TODD: Could we pull up CX, I am going
23 to guess, 282. Could we go to Page 18.

24 Q. (By Mr. Todd) Are these the dumps you are
25 referring to?

1 A. Absolutely.

2 MR. TODD: If we could highlight the
3 possible future dumps.

4 **Q. (By Mr. Todd) What is your understanding**
5 **of Sector 1, Sector 2 and Sector 3?**

6 A. Basically these are all north. A, are
7 basically north dumps, and B are pretty much south
8 dumps. And we can see three, well, four references
9 Sector 1 south, south side Red River, 2, south,
10 same. Sector 3, the same, and then a bridge filled
11 axis across Red River requires tunnel through. That
12 is how you get access to the south side for waste
13 disposal.

14 **Q. Is it understanding, Doctor, and have you**
15 **formed an opinion that this is the same valley fill**
16 **concept Molycorp proposed to the Forest Service in**
17 **1969?**

18 A. It can only be the same.

19 MR. TODD: No further questions,
20 Your Honor.

21 THE COURT: You may step down.

22 (Whereupon, the witness was excused.)

23 THE COURT: You may call your next
24 witness.

25 We have a mechanical issue and so we are

1 going to take about a five-minute break and see if
2 we can get it resolved.

3 (A recess was taken.)

4 THE COURT: We can proceed.

5 MR. HOPSON: Chevron calls Dave Fredley.

6 THE COURT: Thank you.

7 (Whereupon, the witness was sworn.)

8 THE COURT: You may proceed.

9 THE COURT REPORTER: Would you please
10 state and spell your last name for the record?

11 THE WITNESS: My name is David C. Fredley,
12 F-R-E-D-L-E-Y.

13 MR. HOPSON: Mr. Fredley, did you submit
14 written direct testimony in this case?

15 THE WITNESS: Yes, sir.

16 MR. HOPSON: Did you prepare that
17 testimony?

18 THE WITNESS: Yes, sir.

19 MR. HOPSON: Is that testimony true and
20 correct today, to the best of your knowledge?

21 THE WITNESS: Yes, sir.

22 MR. HOPSON: We tender his testimony,
23 Your Honor.

24 THE COURT: Thank you. It will be
25 admitted.

1 (Mr. David Fredley's direct testimony was
2 prefiled and admitted.)

3 THE COURT: Counsel, you may proceed.
4 And tell me your name again.

5 MR. HARRISON: Good morning, Your Honor.
6 Bryan Harrison.

7 THE COURT: Okay. Thank you,
8 Mr. Harrison.

9 CROSS-EXAMINATION

10 BY MR. HARRISON:

11 Q. Good morning, Mr. Fredley.

12 A. Good morning, Mr. Harrison.

13 Q. You worked for the Bureau of Land
14 Management and then the Forest Service as part of
15 your professional career; is that correct?

16 A. Yes.

17 Q. Forest Service is part of the Department
18 of Agriculture?

19 A. That is correct.

20 Q. And BLM is part of the Department of
21 Interior?

22 A. Yes.

23 Q. You would agree that both of these
24 agencies work to serve the public interest, correct?

25 A. Would you repeat that?

1 Q. Both of these agencies work to serve the
2 public interest?

3 A. Absolutely.

4 Q. And based on your experience with both,
5 you would agree that Federal agencies must comply
6 with laws and regulations?

7 A. Yes, and they write regulations.

8 Q. And they aren't to provide special
9 treatment to any one individual or company?

10 A. I wouldn't think so.

11 Q. And oftentimes, agency decisions must
12 balance a broad range of competing interests?

13 A. For sure.

14 Q. Chevron is a for-profit company, correct?

15 A. I assume they are.

16 Q. And Chevron's corporate predecessor,
17 Molycorp, is a for-profit company, as well?

18 A. I would assume so.

19 Q. And their primary purpose is to make as
20 much money as possible for shareholders, correct?

21 A. I think that is one of the goals of
22 companies.

23 Q. The Forest Service does not share that
24 same mission or goal, correct?

25 A. To make money for a company?

1 Q. Correct.

2 A. No.

3 Q. Neither does BLM?

4 A. That is correct.

5 Q. You never worked for either BLM or the
6 Forest Service in New Mexico?

7 A. No, I did not.

8 Q. And when you worked for both, none of your
9 responsibilities involved the Questa Mine?

10 A. That is correct.

11 Q. And none of your responsibilities would
12 either involve the Defense Minerals Exploration
13 Administration or DMEA?

14 A. That is true.

15 Q. In your testimony, you were not providing
16 legal interpretations of the mining laws, correct?

17 A. I am providing an expert on what I believe
18 the mining law states.

19 Q. But you are not a lawyer, correct?

20 A. I am not a lawyer, for sure.

21 Q. And you've never published a treatise on
22 mining laws?

23 A. No, I have not.

24 Q. Throughout your testimony, you repeat a
25 phrase that, "United States was the paramount

1 **proprietor of the Questa site."**

2 **Do you recall that?**

3 A. I do.

4 **Q. And you took this term from a 1914**
5 **treatise by Curtis Lindley?**

6 A. That's correct.

7 **Q. You would consider his treatise as a**
8 **leading authority on mining or mining law?**

9 A. Absolutely.

10 **Q. And Mr. Lindley was a preeminent mining**
11 **attorney?**

12 A. That is correct.

13 **Q. And considered authoritative on these**
14 **issues?**

15 A. Yes.

16 **Q. Would you give his legal interpretations**
17 **of the mining laws more weight than that of a**
18 **layperson?**

19 A. Obviously.

20 MR. HARRISON: If I could show CX
21 Exhibit 10.

22 **Q (By Mr. Harrison) These are excerpts from**
23 **Mr. Lindley's treatise that you testified about on**
24 **direct, correct?**

25 A. Yes.

1 MR. HARRISON: If we could turn to
2 Page 25.

3 Q (By Mr. Harrison) In talking about mining
4 claims, in the middle of Page 25, Mr. Lindley said
5 that, "A patent adds but little to a locator's
6 security."

7 Do you see that?

8 A. Yes.

9 Q. And so as long as a claim is located or
10 staked, patenting doesn't mean much to Mr. Lindley.
11 Would you agree with that?

12 A. No.

13 Q. Are mining claims property rights?

14 A. They are possessory rights.

15 MR. HARRISON: If we could turn to the
16 next page.

17 Q (By Mr. Harrison) At the top of Page 26,
18 the first sentence, Mr. Lindley writes, "The owner
19 of such a location is entitled to the exclusive
20 possession and enjoyment against everyone, including
21 the United States itself."

22 Did I read that correctly?

23 A. You read that correctly.

24 Q. In your direct, you testified that the
25 locator's rights are subordinate to the

1 **United States; is that correct?**

2 A. Yes, I did.

3 **Q. Is that still your testimony?**

4 A. Absolutely.

5 **Q. So you disagree with Mr. Lindley that a**
6 **locator has exclusive possession, even against the**
7 **United States?**

8 A. Absolutely.

9 **Q. But even if the United States is the**
10 **nominal paramount owner or paramount proprietor, as**
11 **you say.**

12 **From a practical perspective, the**
13 **United States did not act as the paramount**
14 **proprietor at the Questa Mine site; is that correct?**

15 A. No, that is not correct.

16 A paramount proprietor is a paramount
17 proprietor. They acted as the Government's
18 representative at the site.

19 **Q. They didn't control any of the mine's**
20 **mineral activities, did they?**

21 A. Of course, they did.

22 **Q. They didn't dictate where and how the**
23 **mining should occur?**

24 A. They dictated how and where waste dumps
25 should be disposed of.

1 Q. We will get to that in a little bit.

2 The Government did not control timber
3 activities on the land, did they?

4 A. When you say, "on the land," what are you
5 referring to?

6 Q. On the Questa site.

7 A. The Questa site has both patented private
8 land and unpatented Federal land, so you'll have to
9 be more specific for me to answer that.

10 Q. So on the unpatented claims for both
11 mining claims and mill sites, the United States did
12 not -- was not in use of that property when
13 Chevron -- after Chevron had located or staked
14 claims on those, correct?

15 A. I don't think that's correct. They had
16 whatever use they wanted to that property.

17 Q. The United States, in fact, did not use
18 that property while Chevron had mill site and mining
19 claims; is that correct?

20 A. I don't have any information that they did
21 not use that.

22 Q. Well, in your deposition, you testified
23 that the Federal Government could use these lands,
24 the service of these lands, for recreations.

25 Do you recall testifying to that?

1 A. I do.

2 **Q. What recreations could have been used in**
3 **the area around the open pit mine when Chevron held**
4 **unpatented mill site and mining claims there?**

5 A. It would have been difficult, but if a
6 hunter wanted to go in there, he probably could
7 have. If a hiker wanted to go in there, he probably
8 could have. If a photographer wanted to go in
9 there, he probably could have.

10 **Q. Chevron had a security gate at the front**
11 **of the facility, correct?**

12 A. Oh, absolutely.

13 **Q. They had fences, correct?**

14 A. There were fences.

15 Could you describe where you might be
16 talking about with that?

17 **Q. Throughout the property there were fences**
18 **that restricted the ability of the general public to**
19 **access the property.**

20 A. There were some fences and some gates.

21 But if my understanding is correct, and I
22 have been on the site a couple of times, those
23 fences and gates were on Molycorp private property.

24 **Q. So if one of Chevron's competitors, say**
25 **Climax, decided it wanted to access the property on**

1 the unpatented mining or mill site claims, would
2 they have been able to go on to that property, given
3 that your testimony is they are public lands?

4 A. Sure.

5 Q. As paramount proprietor, Mr. Lindley also
6 explained that there are, quote, "equitable
7 circumstances that bind the United States from
8 interfering with Chevron's mining or possession."

9 Do you recall him writing about that?

10 A. I don't recall that specific statement.

11 Q. So if we could look below, on Page 26
12 here, the second sentence, quote, "There are
13 equitable circumstances binding upon the conscious
14 of the governmental proprietor that must never be
15 disregarded."

16 Do you see that?

17 A. I do.

18 Q. If the United States were to divest or
19 withdraw Chevron's mining rights, according to
20 Mr. Lindley, that would violate -- that would be
21 improper?

22 A. Would you repeat that again, please?

23 Q. Sure, I will rephrase.

24 The next sentence will be helpful, as
25 well.

1 "Rights have become vested that cannot be
2 divested without the violation of all the principles
3 of justice and reason."

4 So my question is, if the United States
5 were to attempt to divest or withdraw Chevron's
6 mining rights, that would be violative of, quote,
7 "all the principles of justice and reason,"
8 according to Mr. Lindley?

9 A. I guess I would have to research that a
10 little bit further than sitting right here on the
11 stand and -- but the Government has -- has withdrawn
12 from entry of lands that have mining claims all the
13 time.

14 The Government has stopped patenting on
15 the mining claims. So it does it constantly.

16 Q. And, but practically speaking, the
17 United States never withdrew or divested Chevron's
18 mining rights here by withdrawing either of their
19 mining claims?

20 A. Not that I am aware of.

21 Q. And they never restricted any of Chevron's
22 mining claims, correct?

23 A. They never restricted?

24 Q. Yeah. Well, they never -- strike that.

25 MR. HARRISON: Let's look at another

1 authority on the role of the Federal Government with
2 respect to mining claims.

3 If we could show CX006, please.

4 Q. (By Mr. Harrison) You testified in your
5 direct about this 1908 letter to the editor written
6 by Gifford Pinchot; is that correct?

7 A. Yes, sir.

8 Q (By Mr. Harrison) And Mr. Pinchot was the
9 first director of the Forest Service?

10 A. He was the first chief, yes.

11 And he wasn't called a chief at that time,
12 he was just called The Forester.

13 Q. Generally speaking, an individual doesn't
14 or didn't need permission to stake or locate claims
15 in the National Forest; is that correct?

16 A. They needed the lands to be open by the
17 1872 mining log, and so the Federal Government gave
18 them that authority, yes.

19 Q. But other than that, there is no
20 permission that a locator needs to seek or obtain
21 before they can stake a mining claim?

22 A. Well, that is the permission. The Federal
23 Government gave them that permission.

24 Q. And the Forest Service can't interfere
25 with someone's staking of claims; is that also

1 **correct?**

2 A. They can. They can. You know, anytime
3 Dick and Harry can go out there and put four stakes
4 in the ground.

5 MR. HARRISON: Let's turn to Page 3, the
6 second full paragraph that starts with, "The fact
7 that."

8 Q **(By Mr. Harrison) In this paragraph,**
9 **Mr. Pinchot says that the Federal Government will**
10 **stay out of the way of mining activities in the**
11 **National Forest; is that correct?**

12 A. Well, I think you were paraphrasing in
13 there, but I don't think that is exactly what he
14 says.

15 Q. **Mr. Pinchot says here that, at the bottom,**
16 **"No rules and regulations of the Forest Service have**
17 **ever interfered with the right to prospect, locate**
18 **and develop mineral claims."**

19 A. That is right. At that time there were no
20 rules that did that.

21 MR. HARRISON: If we could go to the top
22 of Page 4.

23 Q **(By Mr. Harrison) The first paragraph says,**
24 **"Even if the Forest Service desired to prevent**
25 **prospecting in the National Forest and emphatically**

1 does not, it could not do so under the law."

2 Do you see that?

3 A. Yes, I do.

4 Q. Do you agree with that assessment?

5 A. I do, at that time.

6 Q. You testified at your deposition --

7 A. And I -- and that's because the law at
8 that time allowed prospecting and exploration under
9 the 1872 mining on National Forest, unless they were
10 withdrawn for other purposes.

11 Q. You testified at your deposition that,
12 "The Forest Service did not violate the law or do
13 anything improper," in your opinion, "with the
14 management of the Federal lands regarding Chevron's
15 mining and mill site claims."

16 Do you recall testifying to that?

17 A. I do.

18 Q. Is that still your testimony?

19 A. It is.

20 Q. And since the early 20th Century, Chevron
21 has treated the entire Questa Mine property as its
22 own, both the property it owned and the property it
23 held on patented mining and mill site claims on; is
24 that correct?

25 A. No, I don't think that's correct.

1 Q. Is it true that Chevron included
2 unpatented mining and mill site claims and
3 descriptions of its land holdings?

4 A. Yes.

5 Q. And is it true that Chevron also
6 represented in patent applications that it held
7 possession and control of the located or staked
8 lands?

9 A. That's correct. That is what a mining
10 claim is. It is a possessory right against other
11 junior claimants coming in and jumping the claim.

12 MR. HARRISON: If we could show USX32.

13 Q (By Mr. Harrison) This is an August 1976
14 land status map that was produced by Chevron.

15 Have you seen this map before?

16 A. You know, I have.

17 Q. And is it an accurate map representing
18 Chevron's landownership?

19 A. That, I don't know if it is all accurate
20 on landownership.

21 Q. Do you have any reason to dispute that
22 this was produced by Chevron or that it is a
23 document in this case?

24 A. I have no reason, one way or the other.

25 MR. HARRISON: Your Honor, I would move to

1 admit USX32.

2 MR. HOPSON: No objections, Your Honor.

3 THE COURT: Without objection, admitted.

4 (Exhibit admitted, USX32.)

5 Q (By Mr. Harrison) On this map it shows --
6 this is after the land exchange is completed,
7 correct?

8 A. That is correct. It shows 1976. The land
9 exchange was completed in 1974.

10 Q. And it shows that Chevron has owned or
11 staked virtually all of the land from Questa to Red
12 River; is that correct?

13 A. I assume that is what this -- this map is
14 showing, but I don't know it as a fact.

15 Q. And Chevron denotes the boundary of that
16 area as, quote, "boundary of MolyCorp land."

17 Do you see that?

18 A. I do see that notation.

19 Q. And also, it does show two separate ore
20 bodies here, the northeast zone and the southwest
21 zone?

22 A. It shows some high-grade areas of an ore
23 body, yes.

24 Q. Would you agree that Chevron was able to
25 freely acquire and use the land at and around the

1 **Questa site?**

2 A. No, I wouldn't exactly agree with that.
3 It wasn't exactly easy to acquire the lands in the
4 exchange.

5 MR. HARRISON: Let's look at CX282.
6 We have seen this exhibit several times
7 already, but it is the February 1972 Feasibility
8 Study.

9 If we could turn to Pages 38 and 39.

10 **Q (By Mr. Harrison) This section of,**
11 **"Landownership, Claims, Leases and Patents."**

12 Would you agree with the first sentence
13 here that "Chevron's land acquisition efforts have
14 been relatively unhampered"?

15 A. Well, if that is what it says, they --
16 they'll probably have that understanding.

17 **Q. And this is while the land exchange is**
18 **going on; is that correct?**

19 A. Over the past 50 years, yes.

20 **Q. And in here, it notes that, "That is not**
21 **to say that certain problems have not arisen in the**
22 **purchasing of homesteads and other privately-owned**
23 **land."**

24 Do you see that?

25 A. Yes.

1 Q. And then it concludes, this paragraph,
2 "Forest lands are open to mineral location and
3 virtually all of the Red River trench has been
4 staked with low mining claims under the mining law
5 of 1872."

6 Do you see that?

7 A. I do.

8 Q. So here it seems that the only issue
9 Chevron has with acquiring land is with private
10 landowners and homesteads, not with the Federal
11 Government; is that correct?

12 A. Apparently, that is true.

13 Q. So around the same time the Chevron Group
14 was concerned with changes to the mining laws and
15 regulations, would you agree with that?

16 A. I think the entire mining industry was
17 concerned about changes in the mining law.

18 Q. And fair to say, Chevron felt pressure to
19 act fast in order to own and obtain additional lands
20 at and around the Questa Mine site?

21 A. I think it was one of the considerations,
22 that they agreed to the exchange.

23 MR. HARRISON: If we could look at the
24 middle of Page 38, the paragraph that starts, "It is
25 expected" -- sorry, the next paragraph.

1 Q (By Mr. Harrison) Chevron writes in the
2 memo notes, "The only thing certain is that the
3 mining law of 1872 will be repealed. The only
4 question is what will take its place. No matter
5 what legislation is passed, it will not be as
6 favorable to the mining industry as the present
7 law."

8 Do you see that?

9 A. I do.

10 Q. So fair to say, Chevron felt a need to
11 acquire as much property as quickly as possible
12 before changes to the mining laws would occur?

13 A. I think that is fair to say, and it was a
14 very pressured statement because that is exactly
15 what happened in 1995 when Congress said there would
16 be no more patenting mining claims.

17 Q. And this section ends -- if we could look
18 at Page 39, the last paragraph -- by saying that, "A
19 concerted effort should be initiated in patenting
20 mill site claims adjacent to the Questa main ore
21 body and mill patent ore body areas."

22 So Chevron here is noting that it needs to
23 make a concerted effort at that time to acquire this
24 property?

25 A. Absolutely.

1 Q. If we could just go back up to --

2 A. I assume that is because they would --
3 they would have more control over their own private
4 land than if it were Federal land.

5 Q. And to that point, Mr. Fredley, if we
6 could go back to the paragraph that starts with,
7 "Current proposals."

8 Here Chevron expresses concern that, "The
9 changes in the mining law would allow the Secretary
10 of Interior to dictate the method of prospecting,
11 when mining should start and stop, how the deposit
12 is said to be mined, et cetera.

13 "The investment risk still falls on
14 industry but it will have little control over
15 anything else."

16 Do you see that?

17 A. I do.

18 Q. And that is consistent with the concern
19 that you just testified about?

20 A. Absolutely.

21 Q. You testified, in your direct, that "The
22 United States' ownership rights are similar to a
23 private landowner's fee simple ownership rights."

24 Is that correct?

25 A. Yes.

1 Q. And you also testified that, "The
2 United States holds the same power over Federal land
3 as an individual would over private land."

4 A. More power.

5 Q. The general public cannot enter someone's
6 private property, locate claims and explore for
7 minerals, correct?

8 A. For sure.

9 Q. But that was the case with the
10 United States land until at least 1976?

11 A. That's private individuals.

12 Q. Strike that.

13 Someone from the general public could
14 enter land of the United States, locate claims and
15 explore for minerals without providing any notice to
16 the United States, correct?

17 A. If the lands were open to mineral entry,
18 that is correct.

19 Q. A private fee simple landowner has the
20 right to exclude people from their property,
21 correct?

22 A. That's correct, as does the Federal
23 landowner.

24 Q. But the United States can't pick and
25 choose who stakes mining claims on its property, can

1 **they?**

2 A. That is, that's correct, as long as the
3 person is a citizen of the United States or a
4 corporation, they can stake a mining claim on lands
5 that are available under the 1872 mining law.

6 **Q. And someone just can't start exploring or**
7 **developing a mine on private property without the**
8 **approval of the owner, correct?**

9 A. Correct. And that is the same with the
10 Federal owner.

11 **Q. After 1976?**

12 A. No, since the 1872 mining law, and the
13 Federal owner is the one that passed the 1872 mining
14 law that allowed that person or corporation to come
15 onto the land.

16 **Q. You would agree that the United States**
17 **supports many individuals, companies and industries,**
18 **correct?**

19 A. Yes.

20 **Q. And, in fact, that is the primary purpose**
21 **of the Government itself?**

22 A. I think the primary purpose of the
23 Government is to support the citizens of the country
24 and defend our shores, deliver our mail.

25 **Q. So on some level, then, nothing is**

1 possible without the support or encouragement or
2 involvement of the United States?

3 A. I guess that is somewhat a fair statement.

4 Q. So let's go through some of your direct
5 testimony on areas that you claim the United States
6 supported, encouraged or facilitated Chevron's
7 mining developments.

8 Chevron's open pit mining operations
9 required a tailings implement area, correct?

10 A. Yes, it did.

11 Q. And without that, it would not have
12 existed? The mine could not have existed?

13 A. That's correct.

14 Q. So in 1964, Chevron purchased 440 acres
15 from the State of New Mexico for the first tailings
16 implement area?

17 A. That's correct.

18 Q. And the State of New Mexico knew that
19 Chevron was going to use the land for a tailings
20 area?

21 A. That is correct.

22 Q. And Chevron started construction on the
23 tailings pond the next year, 1965?

24 A. I believe that's correct.

25 Q. Did the State of New Mexico support or

1 encourage Chevron's Questa Mine development by
2 selling them the property for the eastern tailings
3 implement area?

4 A. Apparently.

5 Q. Chevron also needed to obtain property
6 right-of-ways from dozens of private landowners for
7 the tailings implement area; is that correct?

8 A. I believe that is right.

9 Q. And did each of these landowners support
10 and facilitate Chevron's mining operations?

11 A. I have no idea.

12 Q. Well, they provided right-of-ways for
13 Chevron to be able to use the tailings implement
14 area.

15 Would that be sufficient, under your
16 opinion, to constitute support and encouragement?

17 A. A private individual -- private
18 individuals did a right-of-way for tailings
19 implements, is that what you are saying?

20 MR. HARRISON: If we could show USX476.

21 This is an admitted exhibit that was part
22 of Mr. David Shoemaker's deposition and was an
23 attachment to Chevron's January 2001 response letter
24 to the EPA.

25 If we could turn to Page 8.

1 Q **(By Mr. Harrison) This is a list of**
2 **tailings dam previous owners.**

3 You have no reason to dispute the contents
4 **of this list?**

5 THE COURT: Counsel, let me inquire.

6 Are you attempting to do something in
7 contrary to the stipulated order concerning
8 evidentiary items that the tailings don't have
9 anything to do with this case?

10 MR. HARRISON: No, Your Honor, I am
11 simply --

12 THE COURT: What are you trying to do?

13 MR. HARRISON: I am showing Mr. Fredley
14 that -- I'm trying to elicit testimony that there
15 were other individuals and entities who were
16 involved in the development of the Questa Mine site.

17 THE COURT: And your point is?

18 MR. HARRISON: That his testimony is that
19 it was the United States' involvement that
20 encouraged and facilitated, but the point is there
21 are others as well who did that.

22 THE COURT: I think it is a given, but go
23 ahead.

24 Q **(By Mr. Harrison) So for the second**
25 **tailings pond, Chevron purchased land from a BLM**

1 public land sale option in 1966; is that correct?

2 A. That is correct.

3 Q. Chevron needed this land?

4 A. They did.

5 Q. And Chevron initiated the BLM process to
6 request the public sale land auction?

7 A. Yes.

8 Q. Chevron was the highest bidder?

9 A. Yes.

10 Q. And it was reasonable for BLM to accept
11 the highest bid of Chevron, correct?

12 A. Yes.

13 Q. Were any tailings disposal disposed of --
14 strike that.

15 You are not aware of any tailings
16 disposals on the area that was the subject of the
17 public land sale prior to Chevron purchasing it at
18 the public land sale auction; is that correct?

19 A. That is correct.

20 Q. And prior to the land sale auction,
21 Chevron had actually located mill sites on this
22 area, correct?

23 A. That is correct.

24 Q. And so Chevron could have obtained
25 ownership by applying for patents on these lands had

1 **there been a current mining use, correct?**

2 A. As long as they were presently being used
3 and occupied for mining or milling purposes, they
4 could have done that.

5 **Q. Chevron preferred the land sale or the**
6 **public land sale option instead because they thought**
7 **it would be better public relations; is that**
8 **correct?**

9 A. That is correct.

10 **Q. And it was Chevron's decision where to**
11 **locate its tailings implement areas?**

12 A. That is correct. There wasn't too many
13 areas available and that is why they choose this
14 spot.

15 **Q. Chevron also located and patented, in your**
16 **words, quote, "Some mill site claims near the**
17 **western tailings area."**

18 **Is that correct?**

19 A. That is correct.

20 **Q. These are called the Pinon Claims?**

21 A. They are.

22 MR. HARRISON: If we could show USX432.

23 And so the Pinon Claims are the lightly
24 shaded areas around the periphery of the implement
25 area, correct?

1 A. They are the stipulated areas to the north
2 and southwest part, yes.

3 Q. And a diversion ditch goes through these
4 mill sites, correct?

5 A. Apparently, yes.

6 Q. And that is for diverting natural runoff,
7 as you heard Mr. Dewey testify to yesterday?

8 A. That is correct.

9 Q. And the diversion ditch was not used for
10 tailings waste disposal; is that correct?

11 A. It was used to support the tailings
12 disposal.

13 Q. By preventing the natural runoff from
14 going into the tailings area?

15 A. That's correct.

16 Q. I want to ask just two general questions
17 about the tailings pipeline, with respect to
18 ownership.

19 It was Chevron's decision to develop the
20 tailings pipeline; is that correct?

21 A. Absolutely.

22 Q. And Chevron needed to obtain permission
23 for the tailings pipeline from several entities in
24 addition to the Forest Service; is that correct?

25 A. Molycorp did, yes, for sure.

1 Q. And any one of those could have withheld
2 their consent or approval for the routing of the
3 pipeline, correct?

4 A. They could have as private landowners,
5 just as the Forest Service could and the Federal
6 Government could.

7 Q. You testified that special use permits are
8 completely discretionary, correct?

9 A. Yes, I did.

10 Q. But the Forest Service acted properly and
11 followed its regulations when it issued the special
12 use permit, correct?

13 A. I have no reason to think they violated
14 any regulation or law by issuing the special use
15 permit.

16 Q. And there is no reason for the Forest
17 Service to terminate or cancel the special use
18 permit, correct?

19 A. They didn't do it.

20 Q. And there would have been no reason why
21 they could have?

22 A. I don't know of any reason.

23 Q. Another permit that you testified about
24 was the decant water discharge permit issued by BLM.

25 Do you recall that as your testimony?

1 A. I do.

2 MR. HARRISON: If we could show USX432,
3 again.

4 Q (By Mr. Harrison) So the tailings disposal
5 areas are the two dark areas in the middle of the
6 map, correct?

7 A. That is right.

8 Q. And there are two sections of tailings,
9 Section 35 and Section 36?

10 A. In general, that is a correct description.

11 Q. And the decant water discharge permit was
12 only for Section 35 of the tailings area; is that
13 correct?

14 A. As far as I know, that is correct.

15 Q. Chevron did not receive a permit for
16 Section 36 because the water flowed over Chevron's
17 own property and private right-a-ways?

18 A. You know, I am just not sure on that.

19 Q. Okay.

20 A. This diagram does not show the
21 right-of-way, by the way, for the decant water.

22 Q. But --

23 A. It shows present decant but it doesn't
24 show right-of-way.

25 Q. I will ask a general question and not

1 pertaining to the map itself.

2 For the decant water discharge permit in
3 Section 35 over the BLM land, BLM required a
4 stipulation in 1970 that the water must meet
5 Federal, State and Local water quality standards,
6 correct?

7 A. That is my understanding.

8 Q. And this was before the Clean Water Act
9 was enacted, so that did not require Chevron at that
10 time to obtain a national pollutant discharge
11 elimination permit; is that correct?

12 A. I don't know.

13 Q. And we already talked about, but you heard
14 Mr. Dewey testify about how the decant process
15 would, in theory, send clean water into the Red
16 River; is that correct?

17 A. I think that is correct, yes.

18 Q. And so there is no reason, in your
19 opinion, for BLM to not allow Chevron to send clean
20 water over Federal lands into the Red River,
21 correct?

22 A. Correct.

23 Q. We will get to the land exchange in a
24 little bit, but I just want to ask two questions
25 there now.

1 A land exchange would give Chevron fee
2 ownership of that land?

3 A. That is correct. It is also my
4 understanding that there could have been conditions
5 placed on it, but in general, it is fee ownership.

6 Q. And you also agree, as you testified at
7 your deposition, that there was no reason for the
8 Government to disapprove or refuse the land
9 exchange; is that correct?

10 A. No, they were the ones that suggested it.
11 Why would they refuse it?

12 Q. Let's switch gears and talk about the
13 pre-DMEA exploration and a few issues there. I know
14 it's been discussed at length but there are a few
15 questions I want to ask you about your direct
16 testimony.

17 So once Chevron exhausted the high-grade
18 ore in the first underground mine, you say that
19 Chevron had no planned exploration and no reserves
20 until the DMEA application; is that correct?

21 A. That is what Molycorp said, yes.

22 Q. And you heard the testimony of Mr. Dewey
23 yesterday that Chevron knew of the existence of
24 low-grade ore before applying for the DMEA loan,
25 correct?

1 A. Yes.

2 Q. You also heard Mr. Dewey testify that
3 Chevron was very familiar with John Schilling and
4 his 1956 report that noted a large low-grade
5 molybdenum ore deposit, correct?

6 A. Yes.

7 Q. You also heard that Mr. Dewey said that
8 the Chevron team's reluctance to undertake low-grade
9 ore exploration because it, quote, had no use for
10 it, end quote?

11 A. Yes.

12 Q. Do you take issue with any of that of
13 Mr. Dewey's testimony?

14 A. I don't.

15 Q. You also heard Dr. Rigby testify that
16 Chevron was well aware of diamond drilling methods
17 at the time of the DMEA application; is that
18 correct?

19 MR. HOPSON: Objection, Your Honor.
20 Misstates prior testimony.

21 THE COURT: Sustained.

22 Q (By Mr. Harrison) Are you aware of whether
23 diamond drilling methods were prevalent at the time
24 of the DMEA application in the late 1950s in the
25 mining industry?

1 A. Of course.

2 Could you give me a second so I could get
3 a drink of water?

4 Q. You also heard testimony about Dr.
5 Carpenter and his involvement with Chevron at the
6 site prior to the DMEA loan application; is that
7 correct?

8 A. Yes.

9 MR. HARRISON: If I could show CX186.

10 Q (By Mr. Harrison) This is a 1968 article
11 from Robert Carpenter, titled "Geology and Ore
12 Deposits of the Questa Molybdenum Mine Area."

13 Have you seen this before?

14 A. You know, I have seen that.

15 MR. HARRISON: Your Honor, I would like to
16 move for admission of CX186.

17 MR. HOPSON: No objection, Your Honor.

18 THE COURT: Without objections, it will be
19 admitted.

20 (Exhibit admitted, CX186.)

21 Q (By Mr. Harrison) If we could turn to
22 page three, paragraph which begins, "Because of."

23 So you heard the testimony that Dr.
24 Carpenter was intimately involved with the Questa
25 Mine, correct?

1 A. Yes, I did.

2 Q. Okay. In this paragraph, Dr. Carpenter
3 writes, quote, "Underground headings were advanced
4 into target areas and diamond" -- or, excuse me, let
5 me begin with the first sentence of the paragraph.

6 "Because of increasing difficulties of
7 maintaining the small tonnage high-grade production,
8 an intensive exploration program was initiated in
9 1953."

10 Do you see that?

11 A. I do.

12 Q. And then two sentences later, it says,
13 "Underground headings were advanced into targeted
14 areas and diamond drilling was initiated."

15 Do you see that?

16 A. I do.

17 Q. And then the next sentence says, "By 1957
18 it was apparent that the Questa Mine held promise of
19 large reserves of low-grade molybdenum ore."

20 Do you see that?

21 A. I do.

22 Q. You also heard testimony from Mr. Dewey
23 and Dr. Rigby that prior to the May DMEA contract,
24 Chevron was able to obtain millions of dollars in
25 financing, correct?

1 A. Yes.

2 MR. HOPSON: Objection. Again, that
3 question misstates the prior testimony.

4 THE COURT: Can you restate your question?

5 Q **(By Mr. Harrison) Are you aware that in**
6 **June, 1955, Chevron sold Kennecott \$2.8 million**
7 **worth of stock?**

8 A. I guess I am aware of it. I've heard
9 testimony of that but I am not a mine finance expert
10 or stock expert.

11 Q. **Are you aware that in June, 1954, Chevron**
12 **obtained \$1.5 million in loans?**

13 A. Apparently.

14 Q. **And are you aware that Chevron had a**
15 **\$4.2 million stock offering in 1957?**

16 MR. HOPSON: Objection, cumulative.

17 THE COURT: I will overrule that.

18 A. Apparently.

19 Q **(By Mr. Harrison) So in your opinion -- in**
20 **your opinion in this case, you have testified that**
21 **Chevron had given up on exploration until DMEA; is**
22 **that correct?**

23 A. Yes.

24 MR. HARRISON: If we could show USX520.

25 Q **(By Mr. Harrison) This is Chevron's --**

1 Molycorp's 1956 annual report, which predates the
2 DMEA contract, correct?

3 A. Yes, it predates by a few months.

4 MR. HARRISON: If we could go to
5 page four, under "General."

6 Q (By Mr. Harrison) The first paragraph says,
7 "Your company continues its policy of searching for
8 new sources of minerals."

9 Do you see that?

10 THE COURT: The first paragraph?

11 A. Yes, I do.

12 Q (By Mr. Harrison) The first sentence of the
13 next paragraph says, "Concentrated exploration is
14 currently being done at Questa New Mexico."

15 A. Yes.

16 Q. And then about --

17 THE COURT: Why don't you ask him to read
18 it himself and then you can ask him questions.

19 Q (By Mr. Harrison) Sure. I just have one
20 more question on this, but if you could read that
21 paragraph and let me know when?

22 A. Read the entire?

23 Q. Just the paragraph "Concentrated
24 exploration."

25 THE COURT: Just to yourself.

1 A. Okay. I have read it.

2 Q (By Mr. Harrison) In the middle of the
3 paragraph, it says that "Surrounding land had been
4 staked on behalf of your corporation in order to"
5 and then it cuts off "extensions of indicated
6 mineralized area."

7 Do you see that?

8 A. I do.

9 Q. So if, in your opinion, Chevron had given
10 up on exploration efforts, why would they be staking
11 claims prior to the DMEA contract?

12 A. Well, there are lots of areas outside the
13 current underground mine. So I assume that they
14 were looking at other areas.

15 Also, I think what this might be talking
16 about is, this was right in the middle of or towards
17 the end of their negotiations with the DMEA people
18 about initiating a contract.

19 And so when they say "core drilling will
20 shortly begin," I suspect that that is the core
21 drilling that is defined by the contract that is
22 just a couple of months from the future.

23 Q. You have heard testimony about DMEA, that
24 it is a voluntary program, correct?

25 A. Yes, it is.

1 Q. And DMEA requires that the plan must show
2 a geological probability of making a significant
3 discovery?

4 A. Yes.

5 Q. And you heard Dr. Rigby testify earlier
6 today that the purpose of DMEA is not for
7 prospecting?

8 A. That is correct.

9 Q. You testified that DMEA approval of
10 Chevron's application was entirely discretionary,
11 correct?

12 A. That's correct.

13 Q. But, again it was Chevron who decided to
14 submit the application?

15 A. Yes, they did.

16 Q. And they entered into the contract in May,
17 1957?

18 A. That is correct.

19 Q. Chevron was not required to agree to the
20 terms of the contract?

21 A. Molycorp was not required to agree to the
22 terms of the contract, if they wanted the contract.

23 Q. And DMEA repayment obligations are created
24 only if Chevron were to develop a producing mine,
25 correct?

1 A. And a discovery had been determined.

2 Q. Repayment obligations are not contingent
3 on just a recovery?

4 A. Would you state that again?

5 Q. Sure.

6 The repayment obligations under DMEA
7 require both a certificate of discovery and
8 development by the participant, correct?

9 A. As a result of that discovery, that is
10 correct.

11 Q. You testified, in your direct, that
12 repayment was required, quote, "if a discovery was
13 made from the exploration work, the federal
14 government was entitled to interest-free royalties
15 in return for the initial loans."

16 Do you recall that?

17 A. I do.

18 Q. Is that still your testimony?

19 A. Yes.

20 Q. But in addition to that, the repayment
21 obligations are -- require a producing mine,
22 correct?

23 A. Well, that is kind of the only way that
24 you produce minerals and make money is from a
25 producing mine and that is what happened.

1 Q. Chevron or DMEA contract ended in June,
2 1960, correct?

3 A. Yes.

4 Q. And Chevron's final report noted that
5 there were high -- there was a several high-grade
6 ore bodies in the area or low-grade low bodies in
7 the area, generally speaking?

8 A. I think that is correct. That is what
9 Molycorp stated in their final report.

10 Q. And Molycorp also did additional
11 exploration on its own during that same time period,
12 correct?

13 A. That is correct.

14 Q. DMEA also issued its own final report in
15 1960, correct?

16 A. Yes, they did.

17 Q. And it is also noted the presence of a
18 large low-grade ore body, correct?

19 A. Absolutely. A tremendous deposit of
20 low-grade ore.

21 Q. And DMEA's final report also said that it
22 would take considerable time and capacity for
23 explore this low-grade ore body, correct?

24 A. For sure.

25 Q. Is it fair to say that Chevron did

1 substantially more exploration after the DMEA
2 contract than prior to it, with respect to
3 developing the --

4 MR. HOPSON: Objection, cumulative.

5 THE COURT: Overruled.

6 A. Would you repeat that, please?

7 Q (By Mr. Harrison) Sure.

8 Did Chevron do more exploration for the --
9 to develop the open pit mine after the DMEA contract
10 ended?

11 A. They did a lot more drilling and
12 delineation of the ore deposit. There is no
13 question about that.

14 But I think Dr. Rigby addressed that
15 pretty clearly this morning, and I have absolutely
16 no reason to doubt anything he said about that.

17 Q. Chevron didn't formally decide to develop
18 an open pit until 1964, correct?

19 A. I don't know when they formally decided to
20 do it or not.

21 Q. In October, 1964, Chevron estimated the
22 cost of developing the open pit mine and facilities,
23 would be \$27.5 million.

24 Are you aware of that?

25 A. I guess so.

1 Q. And Chevron borrowed 20 million?

2 THE COURT: If you know.

3 Q (By Mr. Harrison) If you know.

4 A. I assume they did but I don't know for
5 sure.

6 Q. And just two years later, in 1966, are you
7 aware that Chevron estimated that the total cost for
8 development, exploration and construction were
9 upwards of \$44 million?

10 A. That sounds right.

11 Q. And that was at the time when the mine was
12 just beginning its operations?

13 A. Correct.

14 Q. So part of its decision to develop and
15 mine using the open pit method, Chevron designed its
16 open pit mining facilities, correct?

17 A. Absolutely.

18 Q. And it built or modified facilities to
19 transition from the underground mine to the open pit
20 mine, correct?

21 A. A major redesign of all of their
22 facilities.

23 Q. It built a new expanded mill with course
24 or storage bins?

25 A. Yes.

1 Q. And that was on land Chevron owned,
2 correct?

3 A. I think so, yes.

4 Q. It built primary, secondary and tertiary
5 crushers on land that Chevron owned?

6 A. They built everything they needed to
7 develop the mine.

8 Q. On land that Chevron owned?

9 A. Some of it, and some of it was on federal
10 land.

11 Q. Subject to a mill site claim?

12 A. That is correct.

13 Q. The land that ultimately became the open
14 pit mine was owned by Chevron at that time, correct,
15 at the start of development?

16 A. Well, I think there are different time
17 frames of ownership. But I don't believe all of the
18 land that was developed into the open pit was owned
19 by Chevron as patented mining claims.

20 Q. So Chevron's open pit operations began in
21 late 1965 and continued in earnest in early 1966?

22 A. That is true.

23 Q. And you heard Mr. Dewey testify yesterday
24 about Chevron's mining claims for the open pit?

25 A. Yes.

1 Q. And in those mining plans, Chevron
2 discussed ways to dispose of waste rock?

3 A. Absolutely.

4 Q. And Chevron chose where to dispose of that
5 waste rock?

6 A. Yes.

7 Depending on what period of time we are
8 talking about here.

9 Q. Sure.

10 At the beginning of the open pit.

11 A. That is correct.

12 Q. And initially, Chevron did not choose
13 these waste-dump areas based on any input from the
14 United States?

15 A. I think that is true, yes.

16 Q. You heard Mr. Dewey testify about the west
17 wall and what Chevron's engineers called Quivering
18 Ridge; is that correct?

19 A. I believe that is -- yeah, I didn't use
20 the term Quivering Ridge, but yes.

21 Q. So shortly after beginning open pit
22 operations in 1967, there was a major fault in the
23 west wall of the open pit?

24 A. I think there was testimony that it was
25 not a fault but there was a weakness.

1 Q. But the weakness was on Chevron-owned
2 land, correct?

3 A. I would have to look at the maps and the
4 patented or unpatented mining claims again, but I
5 won't disagree with it.

6 Q. And you heard Mr. Dewey testify about
7 Chevron deciding to continuing mining and revising
8 its mining plan in response to what has been called
9 a fault?

10 A. Yes.

11 Q. The United States did not participate or
12 make a decision for Chevron to continue its open pit
13 mining under the new mining plan; is that correct?

14 A. That is correct.

15 Q. And the revised mining plan increased the
16 waste ratio from about two-to-one to roughly
17 ten-to-one; is that correct?

18 A. That's correct.

19 Q. So Chevron then needed to figure out a
20 place to put all of this new waste rock, correct?

21 A. That is correct.

22 Q. So in 1968, at about the time of the
23 discovery of the west wall issues, Chevron applied
24 for patents on several mining claims around the open
25 pit area.

1 Are you aware of those?

2 A. Absolutely.

3 Q. And the patents for those issued in two
4 years later, in 1970?

5 A. That is right.

6 Q. But either with acquiring those
7 additional -- that additional land, Chevron felt it
8 was necessary to own additional or possess
9 additional land in order to dispose of its waste
10 rock, correct?

11 A. The mining claim is patented because there
12 is mineral there. And in general, mining companies
13 don't like to put waste upon their mineral land.
14 They don't like to move waste twice.

15 Q. So Chevron felt it needed additional land
16 in addition to that area so it wouldn't have to move
17 the waste rock twice, correct?

18 A. Exactly.

19 Q. And another reason, perhaps, that Chevron
20 needed or wanted different land was it was concerned
21 with changes to the mining laws, at that time?

22 A. I don't think that had any bearing on the
23 need for additional land.

24 The mining operation is what determines
25 whether they needed additional land.

1 Q. A factor -- would you agree that a factor
2 going into the consideration to own the land was the
3 possible changes in the mining laws?

4 A. Yes, there -- that's the -- no doubt.

5 Q. So another idea that Chevron had was to
6 apply for special use permits to dump the waste rock
7 on these lands; is that correct?

8 A. I believe there is something in the record
9 that said that Molycorp was pursuing a long-term
10 special use permit.

11 There was a lot of previous records that
12 showed that it was really -- the Forest Service
13 considered long-term special use permits. A lot of
14 back and forth between the four supervisors' office
15 and the regional office, well, should we issue
16 special use permit or not issue special use permits.
17 There are -- there are a half of -- so I suspect
18 that is what that report was talking about, that it
19 was a Forest Service idea and so they were pursuing
20 that, at one time.

21 Q. Do you recall Mr. Dewey's testimony
22 yesterday about Chevron was reluctant to use a
23 special use permit or apply for a special use
24 permit?

25 A. Yes.

1 Q. And some of the reasons that were
2 expressed were because the special use permit could
3 be withdrawn by the Forest Service, correct?

4 A. That is right, they are discretionary.

5 Q. And it could also require restoration of
6 the land?

7 A. Yeah, I would assume that they could put
8 any kind of stipulation you want in a special use
9 permit.

10 MR. HARRISON: If we could show CX204 and
11 pages one and two.

12 A. But, that was -- that was -- a special use
13 permit was not the preferred method for the land,
14 you know, prior to the land exchange.

15 Q (By Mr. Harrison) The preferred method for
16 Chevron or for the Forest Service?

17 A. For the Forest Service.

18 Q. But isn't it true that it also wasn't the
19 preferred method for Chevron?

20 If we look at the top of page two here, do
21 you see the sentence that says, "We are reluctant to
22 reserve special use permits if they can be avoided"?

23 A. Yes, absolutely.

24 Q. And the reasons explained there were the
25 same reasons that Mr. Dewey testified about

1 **yesterday, correct?**

2 A. That is correct. And it was also the
3 position of the Forest Service not to issue special
4 use permits for waste disposal.

5 **Q. And Chevron never applied for a special**
6 **use permit?**

7 A. They did not.

8 **Q. So another way for Chevron to acquire the**
9 **land was for -- for the -- needed for the waste rock**
10 **was to stake and patent mining and mill site claims**
11 **in the area adjacent to the open pit; is that**
12 **correct?**

13 A. That is correct.

14 **Q. And Chevron had staked mining and mill**
15 **site claims in almost all of that area, prior to the**
16 **1968 time period?**

17 A. Absolutely.

18 **Q. Encompassing something like 2,000 acres or**
19 **more of land?**

20 A. Well, just adjacent to the mining up area,
21 that's correct.

22 **Q. Are you aware that in 1971 Chevron**
23 **estimated that it was only using about 400 acres of**
24 **that area for dumping waste rock?**

25 A. Yes, I am. The Washington office of the

1 Forest Service asked the regional office in
2 Albuquerque to -- to determine the amounts of land
3 that were being used by mining in the area. That
4 was -- that request was made to Molycorp and
5 Molycorp responded that it was around 400 acres that
6 were currently being used for waste disposal on
7 Forest Service land.

8 Q. And as part of that process, are you aware
9 of internal communications at Chevron that said that
10 they still require all of the lands involved in the
11 land exchange, not just the acres involved in
12 current dumping?

13 A. That's correct.

14 Q. And just so we are clear, we are talking
15 about the area around and adjacent to the open pit,
16 not anything on the other side of the highway and
17 river, correct?

18 A. That is correct. By that time it was --
19 it was clear that they weren't going to be using the
20 other side.

21 MR. HARRISON: So let's go back to CX204.

22 This is a July 26, 1968 letter.

23 If you can show the first paragraph,
24 please.

25 Q (By Mr. Harrison) I will give you a second

1 to read this and then I will ask you a question.

2 A. Okay.

3 Q. So this is a letter from John Watson, who
4 is one of Chevron's counsels, to vice president at
5 Chevron, Mr. Kentro.

6 Mr. Watson notes at the outset here that
7 there are -- the mining claims have, quote,
8 "doubtful discoveries."

9 Do you see that?

10 A. I do.

11 Q. And so you can't patent mining claims
12 without mineralization, correct?

13 A. Absolutely right.

14 Q. And so, in order for Chevron to acquire
15 this land through the Mining Act patenting process,
16 they would need to withdraw the mining claims and
17 stake those as mill sites, correct?

18 A. You wouldn't necessarily -- you wouldn't
19 necessarily have to withdraw the mining claims. You
20 could -- so you could still have mill sites on
21 mining claims. It is no big deal.

22 Q. And for the mill sites to be patented,
23 Chevron would need current use at the time of the
24 patent application for each of those claims?

25 A. That's correct.

1 Q. And Mr. Watson acknowledges that in this
2 letter as well, in the second paragraph?

3 A. That is right.

4 Q. And at the time of this 19 --

5 A. A mill site has to be presently used and
6 occupied for those purposes, and that is what he was
7 stating there.

8 Q. And later in this letter, the third
9 paragraph on the second page, Mr. Watson expresses
10 concern about the lack of present use and occupation
11 for these proposed mill sites.

12 Do you see that?

13 A. Yes.

14 Q. To patent a mill site, the mining law
15 requires that the mill sites not exceed 5 acres; is
16 that correct?

17 A. Yes.

18 Q. Like you said, it also requires a current
19 use, not a future use or a planned use?

20 A. That is correct.

21 Q. So is it fair to say that these legal
22 requirements for the mill sites presented a
23 challenge for Chevron if it wanted to apply for
24 patents on these claims?

25 A. Well, if they weren't being presently used

1 and occupied, it would be a challenge.

2 Q. And to get around that challenge, you
3 heard Mr. Dewey testify yesterday that Chevron,
4 quote, "devised a plan that worked around," end
5 quote, the mill cited law.

6 Do you recall that testimony?

7 A. I do.

8 Q. And that was the fan-shaped mill sites
9 that were -- would run from the area near the open
10 pit down to the highway, correct?

11 A. I do, yes.

12 MR. HARRISON: If we could show CX216 at
13 page three.

14 Q (By Mr. Harrison) These are the fan-shaped
15 mill sites referenced by Mr. Dewey and in the
16 July, 1968 letter?

17 A. Yes.

18 Q. And this is the area adjacent to the open
19 pit up to the highway?

20 A. Or down to the highway.

21 Q. Or down to the highway, yes.

22 A. Sure.

23 Q. And so if this was found permissible, that
24 would have allowed Chevron an easier time claiming
25 use on the mill sites so that they could patent

1 **them; is that correct?**

2 A. You know, it was a pretty innovative idea
3 to think about, is that if you just put some waste
4 on the top part of the mill site and it extends all
5 the way down past the road, then you are occupying
6 the entire mill site. It was kind of a funny way to
7 do it.

8 **Q. But that is not consistent with the**
9 **requirements of the mining law, is it?**

10 A. You know, I think that is a question
11 because the mining law just talks about, you know,
12 5 acres in size.

13 What the Forest Service and the BLM prefer
14 is that they be in, you know, 5-acre chunks,
15 according to the rectangular survey system that is
16 preferred.

17 But I don't think there is anything in the
18 mining law that says that has to be that way.

19 **Q. Are you aware of any other set of mining**
20 **or mill site claims that Chevron located at the**
21 **Questa site that were fan-shaped or non-rectangular**
22 **in shape?**

23 A. No. No, I am not.

24 **Q. And they located almost, if not over,**
25 **1,000 mill site and mining claims?**

1 A. Well, I think a small number of mill
2 sites, the tremendous amount of those load claims
3 compared to mill sites.

4 **Q. So Chevron was looking for an easier way**
5 **to simplify the patenting process by coming up with**
6 **the fan-shaped narrow mill site claims, correct?**

7 A. They were thinking of an innovative way to
8 do it.

9 THE COURT: Did they put waste all over
10 those lines?

11 THE WITNESS: Pardon me, Your Honor?

12 THE COURT: Did they put waste all over
13 those mill site lines?

14 THE WITNESS: Eventually. These were
15 never -- these were never staked as mill sites.
16 This was a sketch that was developed by Molycorp.

17 THE COURT: Was this before any patents
18 were issued?

19 THE WITNESS: Absolutely.

20 **Q (By Mr. Harrison) So this letter was**
21 **July, 1968.**

22 **Let's fast forward a few months to**
23 **January, 1969.**

24 **We have heard a lot about this**
25 **January, 1969 meeting between Chevron and the Forest**

1 **Service.**

2 **And you heard that testimony in court,**
3 **correct?**

4 A. Yes.

5 Q. **And the major topic of the meeting seemed**
6 **to be this idea of a Red River Canyon tunnel fill**
7 **idea, correct?**

8 A. That is right.

9 Q. **Do you agree that this would have been a**
10 **major project?**

11 A. Absolutely.

12 Q. **Would it have required extensive design**
13 **and planning?**

14 A. Absolutely.

15 Q. **Permitting from various governmental**
16 **entities?**

17 A. I don't know all the extent of the
18 permitting that would be required from the state. I
19 just don't know.

20 Q. **But permits, in your experience, with a**
21 **project like this, permits would be required?**

22 A. Well, if they are required, they are, but
23 I have no knowledge of what permits might be
24 required in that case.

25 Q. **And would it have involved -- would a**

1 project like this have necessarily involved seeking
2 public input and feedback, as well?

3 A. It could have, sure. Yeah.

4 Q. And if -- strike that.

5 So at the January, 1969 meeting, the
6 Forest Service suggested a land exchange, correct?

7 A. No. It was the Forest Service that
8 suggested the land exchange.

9 Q. I think I said that but if I didn't, then
10 I misspoke.

11 A. Okay.

12 Q. And Chevron agreed to prepare a map of the
13 selected and offered lands following that meeting?

14 A. That is correct.

15 Q. And Chevron never presented a formal
16 application to the Forest Service? Well, anything
17 relating to the Red River -- Red River plan?

18 THE COURT: Well, are we going to go into
19 that proposed Red River overpass?

20 MR. HARRISON: No, Your Honor. I have a
21 few more questions on that before I get to a --

22 THE COURT: Why do you have any questions
23 on that?

24 Q (By Mr. Harrison) In your direct testimony,
25 you took issue with the fact that the Forest Service

1 never undertook an analysis of the Red River Canyon
2 idea; is that correct?

3 A. That's correct.

4 Q. But, there was no way for them to do that
5 without a formal submission?

6 THE COURT: Counsel, why are you going
7 there? I want you to move on. We have exhausted
8 that topic.

9 Q (By Mr. Harrison) Let's go back to the
10 communications following the January, 1969 meeting.

11 So three weeks after that, Chevron's
12 lawyer wrote to the Forest Service to make
13 application for the land exchange.

14 Are you aware of that?

15 A. I am aware of correspondence, yes.

16 Q. And from that point forward, Chevron was
17 fully intent on proceeding with the land exchange,
18 correct?

19 A. It was pretty urgent to proceed with it.
20 They needed that -- that land for the waste
21 disposal.

22 MR. HARRISON: If we could show CX212.

23 So this is the February, 1969 letter we
24 were just discussing.

25 If we could turn to the top of page two.

1 And this letter, again, is from Mr. Watson,
2 Chevron's counsel.

3 Q (By Mr. Harrison) And it says that "Parcels
4 one and two are practically covered with load-mining
5 claims."

6 Do you see that?

7 A. Yes, sir.

8 Q. And parcels one and two, just so we are
9 all clear, are for the -- the areas that ultimately
10 ended up becoming the land subject to the land
11 exchange, correct?

12 A. Yes.

13 Q. And then a few sentences down, it says,
14 "In this same general area are two other claims, the
15 Sugarloaf and Magnifico, which belongs to other
16 persons."

17 Do you see that?

18 MR. HARRISON: If we could just zoom back
19 out, please. If we could go to the last paragraph.

20 Q (By Mr. Harrison) Mr. Watson writes that
21 those who attended the meeting are, quote,
22 "Sincerely appreciative of your suggestions, and
23 thank you for your consideration of this matter."

24 Do you see that?

25 A. Yes.

1 Q. There is nothing here to suggest that the
2 meeting wasn't amiable or that -- not friendly?

3 A. I think it was professional.

4 Q. And so the Forest Service responded to
5 Chevron's letter in April of 1969.

6 Are you aware of that?

7 A. I am sure they did.

8 MR. HARRISON: If we could show CX216,
9 please.

10 Q (By Mr. Harrison) Looking at the third
11 paragraph on the first page, the first sentence
12 says, explains that "Unpatented mining claims would
13 either have to be relinquished or adjudicated."

14 Do you see that?

15 A. Yes.

16 Q. And by adjudicated, that means through a
17 validity contest?

18 A. That's correct.

19 Q. And that makes sense that in order for the
20 United States to be able to convey the land, it
21 needed clear title on that land?

22 A. That is correct.

23 Q. So if Chevron did not want to relinquish
24 the claims, they could have proceeded with the
25 validity contest to clear those claims, the mining

1 **claims, from the land?**

2 A. If they didn't want to relinquish the
3 claims, they could go through a validity contest
4 is --

5 **Q. Yes.**

6 A. -- that what you are asking?

7 **Q. Yes.**

8 A. They would want to contest their own
9 claims, is that what you're asking?

10 **Q. I'm just asking what the letter says in**
11 **that respect with regard to the first sentence here.**

12 A. The first sentence says, you've got two
13 options, you can relinquish them or we can challenge
14 them in a validity contest.

15 **Q. In order for the land exchange to**
16 **continue?**

17 A. Correct.

18 **Q. So that was a choice that Chevron could**
19 **have made. They could have, instead of**
20 **relinquishing them, could have offered to go through**
21 **the validity contest?**

22 A. They would ask for a validity contest with
23 their own claims? I guess they could have, sure.

24 **Q. And the relinquishment is held in escrow,**
25 **correct?**

1 A. Evidently.

2 Q. And if you would look about halfway down
3 this paragraph, it says, "The relinquishments are
4 not recorded or made a public record until the land
5 exchange has reached the point of patent in the
6 respective land."

7 Do you see that?

8 A. I do.

9 Q. And just again, so we are clear, we are
10 talking about this land exchange is for the area
11 adjacent to the open pit mine, nothing across the
12 river or on the other side of the river?

13 A. That's correct.

14 Q. And in this letter, the Forest Service
15 also expressed some concerns of Chevron's proposing
16 of the fan-shaped mill sites; is that correct?

17 A. I would have to look further down the
18 letter.

19 MR. HARRISON: If we could go to the top
20 of the last -- the last paragraph of page one, top
21 of page two.

22 A. Yes, it is in there.

23 Q (By Mr. Harrison) And I think you testified
24 earlier that whether or not the permissibility or
25 whether or not it was permissible to use fan-shaped

1 mill site was a question?

2 A. Correct.

3 Q. And the Forest Service also notes here
4 that, quote, "The shape of the mill sites, as
5 proposed by Molycorp, is also a matter of concern."

6 Do you see that?

7 A. I do.

8 Q. And this is in addition to the concerns
9 that Chevron's lawyers had already raised for
10 itself, to Chevron's employees about the active and
11 current use of mill sites, in order to have those
12 patented, correct?

13 A. Correct.

14 Q. Your testimony is that this letter from
15 the Forest Service threatened Chevron by suggesting
16 a friendly validity contest.

17 Is that still your testimony?

18 A. Yes.

19 Q. But isn't it more the case that the Forest
20 Service is just ensuring that it is acting in
21 compliance with its -- with the laws and
22 regulations?

23 A. Well, of course, the Forest Service and
24 federal government acts in compliance with its laws
25 and regulations. There is no doubt about that.

1 Q. If there was a question, like you said,
2 about the propriety of using the mill site claims in
3 the fan-shaped manner that Chevron is proposing,
4 that would be something that would need to be
5 necessarily resolved, correct?

6 A. That, and the fact that there are fan
7 shapes of mill sites would have to be resolved.

8 Q. You testified that a validity contest
9 would take many years to resolve; is that correct?

10 A. Yes, I testified to that, and so did the
11 Forest Service 30(b)(6) witness.

12 Q. And so CX216 is dated April 18, 1965.

13 If we go forward just a week -- a little
14 more than a week later, Chevron also suggested that
15 the Forest Service initiate a validity contest
16 related to issues of the land exchange?

17 A. Correct.

18 MR. HARRISON: It is -- we can -- can we
19 show CX218?

20 Q (By Mr. Harrison) So this is an April 30th
21 letter from Chevron's counsel to the Forest Service.

22 Do you see that?

23 THE COURT: Yeah, 1969?

24 MR. HARRISON: 1969.

25 A. I see the first page of it.

1 MR. HARRISON: So if we can turn to the --
2 the second page, the first full, the paragraph
3 beginning with Mr. Koen.

4 Q (By Mr. Harrison) This refers to the
5 April 18th letter that we were just looking at?

6 A. Yes.

7 Q. And it says here -- I will give you a
8 minute to read it.

9 A. Okay, got it.

10 Q. So this letter, just barely a week later,
11 Chevron is suggesting to the Forest Service that it
12 initiated a validity contest related to the land
13 exchange, correct?

14 A. On -- I guess on mining claims that it did
15 not own.

16 Q. And Chevron also inquired in this
17 letter -- if we turn to the next page, first full
18 paragraph -- "To avoid the situation, Chevron also
19 inquired as to whether the Forest Service would
20 initiate a quiet title action related to those
21 mining claims that were not Chevron's."

22 Is that correct?

23 A. That were not Molycorp's, yes.

24 Q. And Chevron wanted or needed these mining
25 claims and title quieted so that the land exchange

1 could be -- the land subject to the land exchange
2 could be conveyed with clear title, correct?

3 A. That's correct.

4 Q. And this letter also closes with "Permit
5 us to thank Mr. Parte and Mr. Ashby for your
6 kindness and cooperation in this matter."

7 Do you see that?

8 A. I do.

9 Q. "And the tone is professional and
10 friendly"?

11 A. Absolutely.

12 Q. And so throughout the rest of 1969 and the
13 following year, Chevron expressed continued interest
14 in finalizing the land exchange, correct?

15 A. They had to have it.

16 MR. HARRISON: If we could go to USX34.

17 Q (By Mr. Harrison) This is Chevron's formal
18 land exchange application.

19 Do you see that?

20 A. Yes.

21 MR. HARRISON: And the transmittal letter
22 is actually on pages five and six, so if we could
23 show those.

24 Q (By Mr. Harrison) And it is dated
25 November 5th, 1969?

1 A. Yes.

2 MR. HARRISON: If we go to page six, first
3 full paragraph.

4 Q **(By Mr. Harrison) It notes here that**
5 **"Chevron will relinquish the unpatented mining**
6 **claims when the land exchange is consummated."**

7 Do you see that?

8 A. I do.

9 Q. And it is the future tense here, "when the
10 exchange is consummated and will relinquish."

11 A. That's correct.

12 Q. And it again closes at the end with "Thank
13 you again for your and your staff's assistance and
14 cooperation in this matter."

15 Do you see that?

16 A. Yes, I do.

17 MR. HARRISON: I would move for the
18 admission of USX34.

19 THE COURT: Any objection?

20 MR. HARRISON: No objections, Your Honor.

21 THE COURT: Without objections.

22 (Exhibit admitted, USX34.)

23 MR. HARRISON: If we could show CX235.

24 Q **(By Mr. Harrison) This is an April 30th,**
25 **1970 letter to Molycorp's general manager, Colin**

1 Campbell, from the Forest Service; isn't that
2 correct?

3 A. Yes.

4 Q. Have you seen this document before?

5 A. I have.

6 MR. HARRISON: Your Honor, I would move
7 for admission of CX235.

8 THE COURT: Any objections?

9 MR. HOPSON: No objections.

10 THE COURT: Without objections, it is
11 admitted.

12 (Exhibit admitted, CX235.)

13 Q (By Mr. Harrison) And if we look at this,
14 the first sentence says that "It would be necessary
15 for Molycorp to relinquish the mining claims prior
16 to the issuance of a patent."

17 Do you see that?

18 A. Yes.

19 Q. And then the second sentence of the second
20 paragraph says that "The Forest Service will keep
21 the relinquishment in escrow until we know that the
22 patent will issue."

23 Do you see that?

24 A. That is correct. That's what it says.

25 Q. And again, here it is future tense, will

1 **relinquish. And it does not suggest anything that**
2 **the claim had actually been relinquished, correct?**

3 A. Well, I don't think they had been
4 relinquished, at this time.

5 Q. Nothing to suggest here that the claims
6 would be relinquished until the exchange was
7 consummated, correct?

8 A. That is what this letter says.

9 Q. Do you have any reason to dispute that
10 that was the process by which the relinquishment
11 happened as part of this land exchange?

12 A. The Molycorp did relinquish the claims.
13 Was signed by the general manager, I guess, that
14 Molycorp notarized and given to the Forest Service.

15 Whether or not that relinquishment, I
16 guess you can -- you can argue whether a
17 relinquishment that was signed and notarized was a
18 relinquishment or not.

19 Q. So the other side of the land exchange
20 deal, Chevron provided offered lands to the
21 United States, correct?

22 A. That is correct.

23 Q. Are you aware that in 1972 Chevron
24 provided a warranty deed for the offered lands?

25 A. Yes.

1 Q. And the land exchange was finalized in
2 1974?

3 A. That is correct.

4 Q. Is it your testimony then that the
5 United States owned the warranty deed for the --
6 owned the land, the offered lands, in 1972 prior to
7 the consummation of the land exchange, simply
8 because Chevron provided the warranty deed?

9 A. I don't know. I have not really
10 researched that, to be honest about it.

11 Q. Chevron didn't do anything between the
12 time of the relinquishment in May, 1970 to the
13 finalizing of the land exchange in January of 1974
14 to suggest that they didn't feel like they had the
15 right of access to that property, correct?

16 A. That's correct.

17 Q. Chevron continued to dump waste rock on
18 the land exchange while the land exchange was
19 pending, correct?

20 A. For sure.

21 Q. Would you say it was business as usual?

22 A. I don't think any mining operation is
23 really business as usual.

24 MR. HARRISON: If I could show CX306.

25 So this is part of the land exchange file.

1 If we could go to page 168, the May 20th, 1970
2 letter.

3 Q (By Mr. Harrison) Have you seen this letter
4 before?

5 A. I have.

6 MR. HARRISON: Your Honor, I would like to
7 move for admission of CX306.

8 MR. HOPSON: No objection.

9 THE COURT: Thank you.

10 Without objection, it will be admitted.

11 (Exhibit admitted, CX306.)

12 Q (By Mr. Harrison) And this is a letter from
13 Chevron's counsel to the Department of Agriculture,
14 the Forest Service?

15 A. Yes.

16 Q. If we look at the second paragraph here,
17 it says, "We understand that you will hold the
18 enclosed relinquishment until you are assured by the
19 BLM that patent will issue in a few days to the
20 selected lands involved in the land exchange."

21 Do you see that?

22 A. Absolutely.

23 Q. Again, it is future tense here, will hold
24 until you are assured, correct?

25 A. Correct.

1 Q. And we discussed this earlier, there was a
2 reference to two outstanding mineral claims that
3 Chevron did not possess as part of the land
4 exchange. I believe those were the Sugarloaf and
5 the Magnifico.

6 Do you recall those?

7 A. Yes.

8 Q. Were those ultimately removed from
9 Chevron's land exchange proposal and later patented
10 in the 1980s?

11 A. That's correct.

12 Q. So around the same time or -- excuse me.

13 In 1971, as part of the land exchange, the
14 Forest Service prepared an environmental analysis.

15 Are you aware of that?

16 A. Yes.

17 MR. HARRISON: If you could show CX281.

18 Q (By Mr. Harrison) And this is the 1972
19 Environmental Analysis.

20 Have you seen this document before?

21 A. I have.

22 Q. And this was prepared as a result of the
23 requirements under the National Environmental Policy
24 Act of 1970, correct?

25 A. Yes.

1 Q. Also, called NIPA?

2 A. Yes.

3 Q. If we could turn to page 17, in the middle
4 paragraph that starts, "With Jack Watson from
5 Molybdenum Corp., explained that the company
6 prepared to exchange the land rather than acquire
7 them through mill site applications."

8 Do you see that?

9 A. Well, this was not in the EA unit, right?

10 Q. Correct. This is part of a transmittal
11 letter transmitting the EA, I believe.

12 A. This has -- this is not a transmittal
13 letter.

14 Q. Excuse me, a memorandum to file.

15 A. Okay. Granted.

16 Q. Thank you.

17 MR. HARRISON: If we could go -- now let's
18 look at the Environmental Analysis. If we could go
19 to page six, please, under "Adverse Environmental
20 Effects Which Cannot Be Avoided."

21 Do you see the sentence in the first
22 paragraph that says, "The mining activities will
23 still continue on the patented mining claims or on
24 mill sites and are not dependent upon approval or
25 disapproval of this land exchange proposal"?

1 A. I do.

2 Q. Do you agree with that assessment?

3 A. Not exactly.

4 And the reason I don't agree with it is
5 because it was the Forest Service that disapproved
6 of the use of mill sites. That is the whole purpose
7 of this exchange and subsequent EA.

8 Q. So just to finish, the land exchange
9 timeline, the Forest Service approved the
10 environmental analysis in February 1972, correct?

11 A. That is correct.

12 Q. And then throughout the rest of 1972, the
13 Forest Service approved the land exchange and
14 instructed Chevron on next steps?

15 A. Well, the land exchange was consummated in
16 1974, yeah.

17 Q. So --

18 A. So I don't understand your question.

19 Q. I will strike that.

20 So after this -- so the land exchange was
21 finalized in January of 1974, correct?

22 A. That's correct.

23 Q. A month after the land exchange, Chevron
24 attempted or Chevron sought to protect their mining
25 operations by locating more mining claims in the

1 **area; is that correct?**

2 A. Absolutely.

3 Q. And the reason -- the reason for that is
4 so that their claims, the land that they owned and
5 possible claims were contiguous?

6 A. That is true.

7 Q. And that would be done so Chevron would
8 not have to deal with issues of --

9 A. Claim jumpers.

10 Q. Which we have talked about already.

11 A. Right. And this is the area just
12 contiguous to the exchange boundary.

13 Q. Right.

14 The little block?

15 A. That's right.

16 Q. Exactly.

17 So the land exchange, Chevron received the
18 same land that it would have received if it had gone
19 through the patenting process; is that correct?

20 A. If they were allowed to have gone through
21 patenting, I guess.

22 Q. And even if Chevron had decided to apply
23 for patenting and was allowed to do so, Chevron
24 would have still continued dumping waste rock on
25 these areas; is that correct?

1 A. No, not exactly. I think that is what
2 Dr. Rigby was talking about. If -- if Molycorp was
3 allowed to have their mill sites in the way they
4 wanted to, it would have been a totally different
5 configuration of the waste dumps.

6 Q. But what we have talked about today with
7 these letters and the mill sites is for mill sites
8 on areas adjacent to the open pit and on the north
9 side of the river and highway.

10 We haven't talked about anything going
11 across the river and highway or on the other side,
12 correct?

13 A. We haven't but the Forest Service and
14 Molycorp did.

15 Q. All right. Let's switch gears. I have
16 just a few more things, and talk about Chevron's
17 second underground blockade mine.

18 That began in the mid-1970s, that
19 development?

20 A. I think that is correct.

21 Q. And that was on land that Chevron owned
22 outright?

23 A. I am not 100 percent sure on that.

24 There were patents issued after that, I
25 think -- well, maybe -- I would have to look at the

1 maps but you may be correct.

2 Q. The United States was not involved in
3 Chevron's decision to explore for developer operate
4 the new underground blockade mine, correct?

5 A. No, that was a Molycorp decision.

6 Q. You testified that the federal government
7 wanted the Questa Mine developed in order to help
8 spread economic development in Northern New Mexico;
9 is that correct?

10 A. Yes.

11 Q. Is there anything wrong with that policy?

12 A. No.

13 Q. The federal government helped private
14 entities and individuals all the time, correct?

15 A. Correct.

16 Q. And when it does, it is supposed to be in
17 the public interest?

18 A. Yes.

19 Q. And advance the interest of the
20 United States?

21 A. Yes.

22 Q. So it is not your testimony that the
23 federal government's interest in promoting economic
24 development was improper, is it?

25 A. No, just the opposite.

1 Q. And Chevron was a beneficiary of that
2 policy, agreed?

3 A. Agreed.

4 Q. So if -- just to wrap up, so if the United
5 States had restricted or withdrawn any of Chevron's
6 mining claims or rights on the federal lands at
7 issue here, would that have been improper?

8 A. Would you repeat that, please?

9 Q. Sure. Let me rephrase.

10 If Chevron had restricted Chevron's mining
11 rights, would that have constituted a taking?

12 A. You mean if the federal government had
13 restricted Chevron --

14 Q. Yes.

15 A. -- or Molycorp's?

16 MR. HOPSON: Objection. Calls for a legal
17 conclusion.

18 THE COURT: Sustained.

19 Q (By Mr. Harrison) You testified in your
20 direct that you felt that it may constitute a
21 taking; is that correct?

22 A. I would have to look at the exact words
23 from that.

24 MR. HARRISON: Could we show Fredley
25 Direct 101, please.

1 Q (By Mr. Harrison) The answer at the bottom
2 of the page, it says, "Question: But these laws
3 don't let that kind of incident, patented claims or
4 mining claims, with a mineral fine, do they?

5 "Answer: No, generally not."

6 Do you see that at the bottom?

7 A. Yes.

8 Q. And you say, "It doesn't want to effect a
9 taking, which could be very costly for the
10 United States."

11 MR. HOPSON: Objections, Your Honor. This
12 is referencing the Wilderness Act and a
13 congressional policy here. This has nothing to do
14 with the analogous situation of taking away
15 Chevron's mining claims.

16 THE COURT: And where are you going with
17 this?

18 MR. HARRISON: I will move on, Your Honor.

19 Q (By Mr. Harrison) Chevron exploited the
20 federal lands for its commercial gain, correct?

21 THE COURT: What do you mean by
22 "exploited"?

23 MR. HOPSON: Used it to benefit it
24 commercially as part of its business.

25 A. Yes.

1 Q (By Mr. Harrison) Chevron sought out the
2 United States' assistance so it could further
3 develop its mining operations; is that correct?

4 A. That is correct. And the federal
5 government provided that assistance.

6 Q. And you have testified today and
7 previously that you take no issue with the
8 Government's actions in respect to many of those
9 actions; is that correct?

10 A. That's correct.

11 Q. Chevron approached the United States in
12 every one of those instances, correct?

13 A. That is correct.

14 Q. Chevron freely availed itself with every
15 opportunity provided to it under the mining laws and
16 regulations of the United States, correct?

17 A. Molycorp did.

18 Q. Just so we are clear when we are
19 discussing Chevron today, it also means Molycorp and
20 the predecessors?

21 A. Fair enough.

22 Q. Chevron entered federal lands without
23 paying anything, correct?

24 A. Depending on the time frame, that is
25 correct.

1 Q. Chevron extracted minerals without paying
2 any royalties to the United States, correct?

3 A. Correct, except for the DMEA royalties.

4 Q. And we discussed those, that it was a
5 repayment -- interest-free repayment of the loan
6 amount, correct?

7 A. As a result of discovery, that is correct.

8 Q. And we talked today about how Chevron
9 treated the lands, as if they were their own with
10 fences, security gates, security guards and whatnot,
11 correct?

12 A. We discussed that, and I believe that the
13 fences and the security gates that you may be
14 talking about, were on private land since 1924.

15 Q. We looked at documents today where Chevron
16 called the land its own and part of its land
17 holdings, correct?

18 A. That is, you know, somebody says, I own a
19 mining claim, okay? Fair enough.

20 Q. Chevron decided which claims -- strike
21 that.

22 Chevron was the one who decided which of
23 its mining and mill site claims to apply for patents
24 on, correct?

25 A. Yes.

1 Q. And the United States, in all of these
2 interactions, was simply responding to Chevron's
3 request, correct?

4 A. For patent?

5 Q. Yes.

6 A. Yes.

7 Q. And in respect to the special use permit
8 for the tailings pipeline, the United States would
9 simply respond to Chevron's request for a permit,
10 correct?

11 THE COURT: You are not going repeat
12 everything you already asked, are you?

13 MR. HARRISON: No, Your Honor. Just a few
14 more questions.

15 THE COURT: It is almost 12:00. I hope
16 you are done by then.

17 MR. HARRISON: We will be done by lunch?

18 A. Yes.

19 Q (By Mr. Harrison) So in many respects, it
20 was inevitable for the United States to interact
21 with Chevron given that Chevron was mining on
22 federal lands; is that correct?

23 A. For sure.

24 Q. And there is no legal reason why the
25 United States could have shut down Chevron's mining

1 **operations; is that correct?**

2 A. There is no reason they would have.

3 MR. HARRISON: With the Court's
4 indulgence, just one minute.

5 THE COURT: Thank you.

6 MR. HARRISON: No further questions.

7 THE COURT: We will pick up redirect after
8 lunch.

9 We'll be in recess until 1:30.

10 (A recess was taken.)

11 THE COURT: Good afternoon. You may be
12 seated, and you may begin.

13 MR. HOPSON: Thank you, Your Honor.

14 REDIRECT EXAMINATION

15 BY MR. HOPSON:

16 Q. **Good afternoon. Remember to speak into**
17 **the microphone, Mr. Fredley, okay?**

18 A. Yes, sir.

19 Q. **So do you recall Mr. Harrison asking you**
20 **quite a few questions about the mining laws?**

21 A. Yes.

22 Q. **I want to jump to the bottom line here and**
23 **get your opinion as a historian and an expert in**
24 **mining on Federal lands and just ask you generally**
25 **was it U.S. policy, at least prior to 1975, to**

1 **support and encourage mining on public lands?**

2 A. Absolutely. The title of the 1872 mining
3 law is an act to promote the development of mineral
4 resources of the United States, and that policy
5 continued all the way through to the 1970s.

6 Q. **Focusing on the Questa site specifically,**
7 **did the Forest Service and other agencies in the**
8 **United States Government specifically support,**
9 **encourage and enable the open pit mine at Questa?**

10 A. Absolutely.

11 Q. **Can you tell the Court briefly your**
12 **understanding from the historical record of the**
13 **reasons why they supported the open pit mine?**

14 A. Several reasons. Number one, it was
15 providing strategic minerals to the United States.
16 It was providing employment to the local
17 communities, it was a valuable resource.

18 Q. **Let me ask you this, and we will move on.**
19 **Without the U.S. Government's support, cooperation**
20 **and encouragement, could open pit mining at Questa**
21 **have occurred?**

22 A. No.

23 Q. **Do you recall the additional questions**
24 **about whether the United States retains an interest**
25 **in or the ability to control lands that have**

1 unpatented mining claims?

2 A. Yes.

3 Q. Did the U.S. Forest Service send Molycorp
4 a bill for the value of certain timber that was
5 destroyed when waste rock was placed on unpatented
6 mining claims?

7 A. I have seen that record.

8 Q. Does that suggest to you that the
9 United States continued to have an interest and
10 ability to control land that has unpatented mining
11 claims?

12 A. Absolutely. It was Federal land under
13 Federal control.

14 Q. There was a question, as I recall, whether
15 the Forest Service objected to the fan-shaped claims
16 and that was the basis for rejecting the valley fill
17 plan.

18 Do you remember that question or
19 questions?

20 A. Yes, I do.

21 Q. Do you recall that Mr. Dewey testified
22 that Molycorp actually staked fan-shaped mill side
23 claims in the Capulin Canyon?

24 A. Yes.

25 Q. Did the Forest Service object to those

1 **fan-shaped claims?**

2 A. No. The only claims of any shape that the
3 Forest Service objected to were the ones involving
4 the cross river area.

5 **Q. And was there reason for objecting to**
6 **those, the shape of the mill site claims?**

7 A. At the cross river area because they
8 didn't want Molycorp have mill sites across there
9 and develop their first proposal for a cross river,
10 crossroad waste dump.

11 **Q. I want you to focus for a minute on the**
12 **land that Molycorp obtained in the land exchange.**
13 **And I just want to ask you this question: Prior to**
14 **January '74 when the land exchange was consummated,**
15 **who owned that land?**

16 A. Federal Government.

17 **Q. Did the fact that mining claims were**
18 **relinquished or in escrow change that in any way?**

19 A. Absolutely not.

20 MR. HOPSON: I would like to turn,
21 Ms. Hutchman, to U.S. Exhibit 520.

22 **Q. (By Mr. Hopson) Which I will tell you,**
23 **Mr. Fredley, is the 1956 report to stockholders with**
24 **Molycorp.**

25 MR. HOPSON: And if we could go to Page 4

1 of that, I believe it is the last page. And if you
2 could please blow out the fourth paragraph from the
3 bottom.

4 Q. (By Mr. Hopson) Which you were shown by
5 Mr. Harrison during your cross-examination.

6 Do you recall reading that?

7 A. Yes.

8 Q. Mr. Harrison pointed out that this was
9 prior to the execution of the DMEA contract,
10 correct?

11 A. That is correct.

12 Q. But when, in fact, did Molycorp apply for
13 the DMEA loan?

14 A. Several months prior to this document.

15 Q. This document is dated December 31st, I'm
16 sorry, that is the year it is reporting. It is
17 dated March 14, 1957. It is reporting on the year
18 1956.

19 Do you recall when the DMEA contract was
20 actually executed?

21 A. May 1957.

22 Q. So was the DMEA contract well underway by
23 the time this report was written?

24 A. Pretty much.

25 MR. HOPSON: Let's please call up,

1 Ms. Hutchman, Chevron's Exhibit 216.

2 Q. (By Mr. Hopson) And this you will recall,
3 Mr. Fredley, is a correspondence from the Department
4 of Agriculture Forest Service to Mr. Watson, the
5 Molycorp attorney, correct?

6 A. Yes.

7 Q. And this document, if you recall, contains
8 the drawings of the fan-shaped claims?

9 A. Yes.

10 Q. I want to call out something else in here.

11 MR. HOPSON: Could we go to the second
12 page, Page 2 of 8 and call out the final, second to
13 the final paragraph.

14 Q. (By Mr. Hopson) Let's just take a second
15 to look at that, Mr. Fredley.

16 The first sentence says, "We recognize
17 that sufficient land adjacent to the mine for waste
18 dumps must be made available to Molycorp by some
19 means."

20 Based on your entire review of the record
21 is that the Forest Service position that they must
22 make land available for waste?

23 A. Yes.

24 Q. Prior to the time of the valley fill
25 proposal did the U.S. Forest Service ever object to

1 placing rock or waste on unpatented claims?

2 A. No.

3 Q. Let me ask you, do you recall that there
4 is a regulation governing mill sites?

5 A. Yes.

6 Q. And it requires the mill sites to be
7 5 acres, right?

8 A. That is correct.

9 Q. But it doesn't say anything about the
10 shape?

11 A. That is right. I think that is Department
12 of Interior regulations.

13 MR. HOPSON: Let's call out 281,
14 Chevron 281.

15 Q. (By Mr. Hopson) Mr. Fredley, you see here
16 that this is the environmental analysis done by the
17 Government in connection with the land exchange,
18 correct?

19 A. Yes.

20 Q. I just want to call out one thing the
21 Government says in this document, and it is at
22 Page 6 of the original document, which is at Page 7
23 of the PDF.

24 MR. HOPSON: One page prior, sorry,
25 Ms. Hutchman. If you could call out the

1 alternatives to the proposed action.

2 Q. (By Mr. Hopson) Just take a quick look at
3 that, Mr. Fredley, so we know what you are talking
4 about here.

5 Have you had a chance to skim that?

6 A. Yes.

7 Q. I want to ask you about one sentence in
8 the middle paragraph that begins, the second
9 alternative this sentence begins, "Under the mining
10 laws."

11 "Under the mining laws," the Government
12 says, "the mining company has every right to use
13 mill sites for waste disposal areas."

14 Is that statement that I just read
15 consistent with your understanding of the constant
16 Forest Service policy other than with respect to the
17 valley fill plan?

18 A. Absolutely.

19 MR. HOPSON: Let's look at Chevron
20 Exhibit 282.

21 Q. (By Mr. Hopson) This, Mr. Fredley, is the
22 interim report of feasibility for the Questa site,
23 correct?

24 A. Yes.

25 Q. Are you familiar with this document?

1 A. Yes.

2 MR. HOPSON: Let's turn to Page 33 of 60.

3 Q. (By Mr. Hopson) You know that this is a
4 report, Mr. Fredley, that is made in February of
5 1972, right?

6 A. Yes.

7 Q. I want to call out what the language at
8 the top of the page that says, "Present disposal
9 areas."

10 And I want to ask you about the first
11 sentence, Mr. Fredley. It says, "Most of the
12 present waste is disposed on land that is the
13 property of the Federal Government. This is done
14 with the cognizance and approval of the
15 administrating agency, the U.S. Forest Service."

16 If you will look back at your study of the
17 record for many years, is that single statement
18 consistent with your opinions and conclusions?

19 A. Absolutely.

20 Q. You were shown Chevron 186, which is an
21 article written by Robert Carpenter later in time,
22 1968.

23 Do you recall that?

24 A. Yes.

25 Q. We don't need to call that up, but

1 **Mr. Harrison read a paragraph in which Mr. Carpenter**
2 **talked about exploration for low grade ore occurring**
3 **as early as 1953.**

4 **Do you recall him reading you that?**

5 **A. I do.**

6 **Q. Do you also recall that Dr. Rigby**
7 **testified and others confirmed that there was no**
8 **drilling at Questa prior to the DMEA contract.**

9 **Do you recall hearing that testimony?**

10 **A. I do.**

11 **Q. What does the historical record show?**

12 **A. The historical record shows without a**
13 **doubt that there was no diamond drilling done at the**
14 **Questa Mine prior to the DMEA.**

15 **Q. The article is in 1968, he is referring**
16 **back to 1953. Did something important happen at the**
17 **Questa Mine site between 1953 and 1968?**

18 **A. Well, development of a large low grade ore**
19 **deposit.**

20 **Q. Do you think that might have influenced**
21 **Mr. Carpenter's recollection of his own advice or**
22 **perhaps his recounting of his own advice?**

23 **A. It very well could have.**

24 **Q. Mr. Carpenter never recommended looking**
25 **for a low grade ore.**

1 A. He did not.

2 MR. HOPSON: Ms. Hutchman, let's call up
3 Chevron Exhibit 218, please.

4 Q. (By Mr. Hopson) Take a look at that and
5 just make sure you recall what this is about. It is
6 a letter from Mr. Jack Watson to the United States
7 Department of Agriculture Forest Service, and it is
8 dated April 30, 1969.

9 Do you recall being asked about this?

10 A. Yes.

11 Q. Let me show you what you were asked about
12 on Page 2 of 3. Mr. Harrison called out language in
13 the first full paragraph asking if the Forest
14 Service would contest certain claims.

15 Do you see that language?

16 A. Yes, I do.

17 Q. And he said, in essence, hey, this is,
18 Molycorp's asking for validity contest, right?

19 A. Yes.

20 Q. What land, what challenge to the title is
21 at issue here?

22 A. Two unpatented mining claims not owned by
23 Molycorp.

24 Q. These are two claims on which individuals
25 named Emma Lou Reach and David Williams are fighting

1 **with Molycorp over the patenting, correct?**

2 A. Correct.

3 MR. HOPSON: If you will flip the page to
4 Page 3, could you call out the paragraph that
5 begins, "To avoid this situation."

6 Q. **(By Mr. Hopson) What is Mr. Watson asking**
7 **the Forest Service to do, as you understand it?**

8 A. To bring some action to quiet the title so
9 that the exchange would move forward.

10 Q. **He is asking the Forest Service to do his**
11 **work as an attorney because he is a good lawyer?**

12 A. That is right.

13 Q. **Is this in any way related to the Forest**
14 **Service threatening a validity contest to shut down**
15 **the valley fill plan?**

16 A. No.

17 Q. **Okay. Did the Forest Service threaten a**
18 **validity contest for the purpose of shutting down**
19 **the valley fill plan?**

20 A. Yes.

21 Q. **Did the Forest Service force the land**
22 **exchange?**

23 A. Absolutely, and the record is clear on
24 that.

25 Q. **And that resolved in a long angle of**

1 **repose waste piles above the Red River and the**
2 **highway?**

3 A. Absolutely. There is no question that the
4 Forest Service made that the only option for
5 Molycorp.

6 **Q. All right.**

7 MR. HOPSON: Thank you. Mr. Fredley.
8 Your Honor, I have nothing else.

9 THE COURT: Thank you. This witness may
10 step down.

11 (Whereupon, the witness was excused.)

12 THE COURT: And you may call your next
13 witness.

14 MR. HOPSON: I shouldn't have walked away.

15 Your Honor, Chevron calls Dr. Tim

16 Considine.

17 (Whereupon, the witness was sworn.)

18 THE DEPUTY CLERK: Please have a seat.
19 State and definitely spell your last name, please.

20 THE WITNESS: My name is Timothy
21 Considine, C-O-N-S-I-D-I-N-E.

22 MR. HOPSON: Mr. Considine, did you
23 prepare written direct testimony in this case?

24 THE WITNESS: I did.

25 MR. HOPSON: Is that written direct

1 testimony accurate to the best of your knowledge?

2 THE WITNESS: Yes, sir, it is.

3 MR. HOPSON: Do you wish to make any
4 changes, amendments or modifications to it?

5 THE WITNESS: No, I do not.

6 MR. HOPSON: Thank you. Your Honor, we
7 tender Dr. Considine.

8 THE COURT: Very good, you may
9 cross-examine.

10 (Dr. Timothy Considine's direct testimony
11 was prefiled and admitted.)

12 THE COURT: You may proceed.

13 CROSS-EXAMINATION

14 BY MR. HOSHIJIMA:

15 Q. Dr. Considine, was Molycorp a for-profit
16 company?

17 A. Yes.

18 Q. Was Molycorp engaged in commercial
19 activity under the direction of its executives and
20 Board of Directors?

21 A. I would presume so.

22 Q. Was all of that commercial activity
23 conducted for the purpose of making a profit for its
24 stockholders?

25 A. Yes, I believe so.

1 Q. If the Questa Mine were not profitable,
2 Molycorp could have stopped mining it at any time,
3 correct?

4 A. That is an option they could exercise,
5 yes.

6 Q. The Government never forced Molycorp to
7 stay in business if it was unprofitable, did it?

8 A. Not to my knowledge.

9 Q. Let's turn to your direct testimony. You
10 began your testimony by describing the Government's
11 approach to molybdenum during World War II, correct?

12 A. Yes, sir.

13 Q. Was World War II during Molycorp's first
14 underground mining phase?

15 A. Yes.

16 Q. That was the first of three phases of
17 mining at the Questa site?

18 A. Yes.

19 Q. Was that the old underground mine that
20 Molycorp operated until about 1956?

21 A. Yes, it was.

22 Q. During World War II were there a number of
23 Government programs to simulate the production of
24 various resources, including molybdenum?

25 A. Yes.

1 **Q. Did Molycorp participate in any of those**
2 **programs?**

3 A. As I described in my report, no.

4 **Q. Did Molycorp receive Government aide**
5 **through the defense planned corporation program?**

6 A. No, they did not.

7 **Q. Did Molycorp receive Government aide**
8 **through the emergency planned facilities program?**

9 A. No, they did not. And in my report I
10 described the reasons why they did not. They were a
11 fairly small operation and they were well on in
12 their production period. They had been producing
13 more than 20 years, at that point, and I judged that
14 there were little incentives for them to adopt those
15 offers.

16 **Q. Did Molycorp receive Government aide**
17 **through the necessity certificates program?**

18 A. No.

19 **Q. Do you agree, then, with Dr. Brigham's**
20 **expert opinion that Molycorp received no Federal**
21 **assistance through any World War II programs that**
22 **were potentially available at that time?**

23 A. Yes.

24 **Q. Let's pull up your direct testimony and**
25 **turn your attention to the testimony at the bottom**

1 of Page 6 to the top of Page 7.

2 Did you testify that the postwar decline
3 in molybdenum production contributed to the
4 United States passage of the Defense Production Act
5 of 1950?

6 A. I think that was one factor in it. There
7 were many considerations in the passage of that
8 legislation. There was an expectation that world
9 economic growth would accelerate into the future and
10 there was overarching concern that resource
11 availability could be an issue that would constrain
12 the potential of the economy to grow.

13 Q. The Defense Production Act of 1950 was not
14 specifically about molybdenum, was it?

15 A. As far as I understand it, it covered many
16 nonfuel and nonfuel minerals, including molybdenum.

17 Q. The Defense Production Act, then, was a
18 wide-ranging statute that had to be with expanding
19 the supply of various materials not just molybdenum,
20 right?

21 A. Yeah, I would agree with that, yes.

22 Q. So when you say that the decline in
23 molybdenum production contributed to the passage of
24 the Defense Production Act, you are not making that
25 statement as an expert in mid-20th Century American

1 **history, are you?**

2 A. Well, can you refer, give me a moment
3 just --

4 MR. HOPSON: Your Honor, could I remind
5 the witness that he has a binder with all of his
6 testimony sitting right there if he is looking for
7 something else.

8 THE WITNESS: Thank you.

9 A. Yeah, I did mention, "The post-war decline
10 in molybdenum production contributed to the
11 United States Government's passage of the Defense
12 Production Act of 1950."

13 **Q. (By Mr. Hoshijima) Did you review the**
14 **legislative history of the Defense Production Act in**
15 **making that statement?**

16 A. Not in great detail.

17 **Q. So are you opining that molybdenum**
18 **specifically was the reason that Congress decided to**
19 **pass the Defense Production Act?**

20 A. That was not my intent in that statement.
21 I think it was a contributing factor.

22 **Q. You don't have an opinion on the degree of**
23 **contribution, though?**

24 A. No.

25 **Q. Let's keep moving forward in time.**

1 Did molybdenum participate in any
2 Government incentive programs during the Korean War?

3 A. Not that I am aware of.

4 Q. The Korean War was also during the first
5 underground mining phase, correct?

6 A. May I make a correction on that?

7 Q. Please.

8 A. When you asked did molybdenum contribute
9 or participate in any Government programs during the
10 Korean War, I answered with respect to Molycorp.

11 I am not -- I believe other producers in
12 the -- other molybdenum producers may have
13 participated in those programs.

14 Q. My question was specifically about
15 Molycorp.

16 A. Okay.

17 Q. To clarify the record, Molycorp did not
18 participate in any Government incentive programs
19 during the Korean War, correct?

20 A. Yes, that is correct.

21 Q. And, again, that was during the first
22 underground phase?

23 A. Yes.

24 Q. Even without Government aide from these
25 World War II or Korean War programs, Molycorp

1 **profited from the first underground mine, correct?**

2 A. Yes.

3 **Q. By the mid-1950s the first underground**
4 **mine was beginning to run out of ore, correct?**

5 A. Yes, that is correct.

6 **Q. You offer an opinion that Molycorp would**
7 **not have undertaken any more exploration at the**
8 **Questa site after that time without assistance from**
9 **the DMEA, correct?**

10 A. Yes. The way I viewed it was from a
11 project finance standpoint where if Molycorp wished
12 to find new reserves, they would have to explain
13 their current production trajectory, which was
14 approaching depletion, and it would be really
15 difficult for them to make the case that what they
16 were doing could be extended.

17 It was a small operation and as the
18 previous witnesses have described, they were
19 primarily focused on one form of mining that did not
20 include open pit mining but instead focused on
21 underground mining following fairly high
22 concentrated or veins.

23 MR. HOSHIJIMA: Let's pull up that
24 testimony on Page 11 of your direct exam.

25 **Q. (By Mr. Hoshijima) We are looking at a**

1 couple of questions and answers in the middle of
2 that page.

3 This is a similar opinion to what
4 Dr. Rigby and Mr. Fredley testified about earlier,
5 right?

6 A. Yes, it is similar.

7 Q. Are you relying on their opinions or are
8 you putting forth this opinion independently?

9 A. I am putting it forth independently based
10 on my experience teaching mineral economics for more
11 than 20 years at Penn State and working with mining
12 engineers where I learned that the expenditures for
13 the discovery of ore bodies is very high risk.

14 And then once that is established there is
15 success, there are very significant capital
16 expenditures that follow to identify, delineate and
17 define the ore body and demonstrate to banks, in
18 particular, that the development risk is lower and
19 production could be at some point contemplated.

20 Q. Dr. Considine, my question was just
21 whether you had an independent opinion. That is a
22 yes or no?

23 A. That is a yes.

24 THE COURT: He answered the question.

25 MR. HOSHIJIMA: He answered a lot more

1 than the question, Your Honor.

2 Q. (By Mr. Hoshijima) Were you in the
3 courtroom yesterday listening to Dr. Rigby's
4 testimony on this issue?

5 A. Yes.

6 Q. Were you listening to Mr. Fredley's
7 testimony on this issue?

8 A. Yes, yes.

9 Q. In that case we will try to move through
10 this fairly quickly.

11 Do you believe that Molycorp started a
12 private exploration program in 1954, which was
13 three years before the DMEA contract?

14 A. When you use the term private, what was a
15 private?

16 Q. A private exploration program?

17 A. Private exploration program. That seems a
18 bit new to me. I know there was exploration --
19 mining companies do exploration all the time.

20 What I did in my research behind the
21 expert report was I looked at the annual reports and
22 one of the difficulties with looking at the annual
23 reports and making inferences is that they cover the
24 entire company, not just molybdenum production, but
25 the other minerals that Molycorp produced.

1 Q. Let me make sure I understand the answer.
2 Are you saying that Molycorp did start a private
3 exploration program at the Questa site in 1954?

4 A. When you say private exploration effort,
5 it sounds like some sort of company, and I just -- I
6 am unaware of that.

7 MR. HOSHIJIMA: Can we pull up USX003,
8 please, and turn to page -- well, let me show the
9 cover first.

10 Q. (By Mr. Hoshijima) Do you recognize this
11 as Molycorp's statement to the SEC?

12 A. Right, from 1964.

13 Q. And you see that at the very top of that
14 document?

15 A. Yes, thank you.

16 MR. HOSHIJIMA: Let's turn to Page 17.
17 Can we magnify the second to the last paragraph
18 starting with, "In 1954."

19 Q. (By Mr. Hoshijima) Dr. Considine, can you
20 review this paragraph?

21 A. Yes, I remember reading this, awhile ago.

22 Q. Do you agree, then, that in 1954, which
23 was three years before the DMEA contract, Molycorp
24 started a privately-funded exploration program at
25 the Questa site?

1 A. That is what the words say, yes.

2 MR. HOSHIJIMA: We can take that down.

3 **Q. (By Mr. Hoshijima) Do you agree with the**
4 **prior testimony that Molycorp obtained millions of**
5 **dollars in financing through bank loans and stock**
6 **offerings in 1954 and '55?**

7 A. I heard that in the previous testimony,
8 and I believe it to be true.

9 **Q. Any reason to believe that is not true?**

10 A. No. I would add, though, that I believe
11 those statements are based on the overall capital
12 raising by the entire company. So it is not clear,
13 and that is one of the difficulties I had in my
14 research. In using the annual reports, they report
15 consolidated income assets and activity. They have
16 records broken down by commodity, but oftentimes the
17 numbers are not as aggregated.

18 **Q. Molycorp during this time period had**
19 **operations outside of Questa, New Mexico, correct?**

20 A. That is correct.

21 **Q. What are some of those other operations?**

22 A. As I recall, in the late '50s there was a
23 mine, rare earths mine, a Columbian mine, and there
24 were other properties that were in various stages of
25 development, such as the Québec property previously

1 discussed in prior testimony.

2 Q. Is it fair to say, then, that in this time
3 period, and that is the 1950s, Molycorp is a company
4 of international scope?

5 A. Yeah, yes.

6 Q. We talked about the bank loans and the
7 stock offerings in the mid-1950s. Did that give
8 Molycorp millions of dollars of cash in hand as of
9 1955?

10 A. You know, I really can't say what their
11 capital needs and there -- you know, when companies
12 deal with capital, it is quite complicated and I
13 didn't really have any insights into their sources
14 and uses of capital other than just reading the
15 annual reports.

16 MR. HOSHIJIMA: Can we pull up USX519,
17 which has been previously admitted.

18 Q. (By Mr. Hoshijima) Do you recognize this
19 to be Molycorp's report to stockholders for the year
20 ending 1955?

21 A. Yes.

22 MR. HOSHIJIMA: Let's go to Page 6,
23 please. If we can expand the top half of the page
24 under Current Assets.

25 Q. (By Mr. Hoshijima) This is for the year

1 1955. Molycorp has \$3.15 million in cash on hand,
2 correct?

3 A. Yeah, yes.

4 Q. In your direct testimony you discuss 2019
5 dollars versus dollars of the day, let's say dollars
6 in 1956.

7 Do you recall that?

8 A. Yes.

9 Q. This \$3.15 million that Molycorp had on
10 hand in 1955, that is worth a lot more than
11 \$3 million is worth today, correct?

12 A. In today's dollars it would be larger than
13 the numbers reported on the page here, yes.

14 Q. Many times larger?

15 A. Yes. But may I add a clarification here,
16 firms use cash for a variety of uses. They have
17 cash needs other than exploration, operations, and
18 so on, payroll, benefits. There are many uses of
19 cash.

20 Q. It would have been Molycorp's choice how
21 to spend that cash?

22 A. Of course.

23 Q. It had a variety of options, including
24 exploration, right?

25 A. Yes, yes.

1 **Q. The Government had no say in how Molycorp**
2 **spent this cash, right?**

3 A. Not that I am aware of.

4 MR. HOSHIJIMA: We can take down this
5 document.

6 **Q. (By Mr. Hoshijima) Dr. Considine, do you**
7 **agree with Mr. Fredley's testimony that to obtain**
8 **DMEA funding an applicant had to show the geologic**
9 **probability of making a significant discovery?**

10 A. Well, I am not really qualified as an
11 economist to opine on that. What I can tell you is
12 that I read the supporting documentation and I
13 notice that is the description of the DMEA program.

14 And what struck me was they had a table at
15 the end of loans that -- the number of loans
16 approved and denied. And they mention in the
17 narrative that one of the criteria was the presence
18 or the possibility of reserves being at the
19 location.

20 And that reminded me of an old adage in
21 the oil industry that the best place to drill for
22 oil is in an oilfield. In other words, and this, I
23 think this applies to minerals as well. So if you
24 already have a site that is in production, it is
25 likely that there could be additional reserves

1 nearby. So, yes, I agree with Mr. Fredley's
2 assessment.

3 Q. To follow-up on that statement about the
4 oilfields.

5 A. Yes.

6 Q. At the Questa site Molycorp had been
7 mining molybdenum for decades, right?

8 A. Yes. When we are talking 1955, it would
9 have been about 35 years, yeah.

10 Q. Given that, to obtain the DMEA funding
11 Molycorp, had to demonstrate a significant
12 probability of finding a discovery. Couldn't
13 Molycorp have gone to a private lender with that
14 same geological information and requested a loan?

15 A. Well, it is possible, but as I mentioned
16 in my report that this mine, this particular mine, a
17 fairly small mine by world standards, was nearing
18 the end of its useful life. It was depleting. So
19 it probably would have been a tough sell, if you
20 will, on that basis.

21 Q. You can't rule out the possibility that if
22 the DMEA contract had not been awarded Molycorp
23 could have gotten a private lender to give it a loan
24 based on that same geological information?

25 A. Well, anything is possible, but the fact

1 of the matter is DMEA loaned Molycorp money and they
2 both entered an exploration effort. That is a fact.

3 Q. Do you recall how much money Molycorp was
4 able to obtain from the DMEA in a loan?

5 A. It was about half a million dollars in
6 dollars of the day --

7 Q. Was --

8 A. -- total, and then they shared their cost,
9 50/50.

10 Q. The amount Molycorp got from the
11 Government was no more than \$250,000, correct?

12 A. Yeah, it could have been slightly over
13 that.

14 Q. \$255,000?

15 A. Yeah, that's correct.

16 Q. Do you recall the testimony from, I
17 believe yesterday, that Molycorp did not actually
18 even use that whole amount, it only used about
19 \$200,000?

20 A. Yes, I recall that.

21 Q. Do you agree with the prior testimony that
22 during the period of DMEA funding, which was about
23 1957 to 1960, Molycorp spent over 1 million of its
24 own money for exploration efforts?

25 A. That sounds about right, yes, I agree with

1 that.

2 Q. Do you agree with the prior testimony that
3 during the 1957 to 1960 time period Molycorp
4 conducted thousands of feet of drifting and
5 crosscutting on its own without the DMEA funding?

6 A. I heard that and I can't dispute that.
7 Again, I am an economist, not a mining engineer. I
8 was struck by Dr. Rigby's testimony that it was the
9 geologic knowledge and expertise that the USGS
10 shared with Molycorp that was quite valuable.
11 Sometimes there are things that people do that
12 aren't monetized, and this may be one example.

13 Q. Let's go up to Page 12 of your testimony.
14 In the second to the last answer on that
15 page you say, and I am referring to the second half
16 of that answer. "Molycorp would not have been able
17 to borrow the money needed for this exploration
18 before the Federal Government's DMEA loan."

19 A. Yes, that is clear.

20 MR. HOSHIJIMA: And let's get rid of that
21 magnification. And go to the next page.

22 Q. (By Mr. Hoshijima) In the second to the
23 last answer on that page you say, "Molycorp could
24 have never secured the necessary financing to
25 delineate and develop the low grade ore body without

1 the Government's certification."

2 Is that your testimony?

3 A. Yes.

4 Q. The word "never" in there is very
5 definitive, right?

6 A. Yes.

7 Q. You didn't qualify that statement in your
8 direct testimony, did you?

9 A. Apparently not.

10 Q. But you didn't site any historical
11 document in which a bank or lender says that it
12 would not have provided a loan but for the DMEA
13 certification, correct?

14 A. It is hard to find a counterfactual, I
15 didn't look for it. I was just, again to reiterate,
16 I was -- I viewed Molycorp at that point in time
17 when the DMEA contract was struck in 1957 as a small
18 company or a small operation that was sort of on its
19 last legs and they needed outside help, primarily in
20 terms of a paradigm shift on how they would look for
21 extending their reserve base.

22 Q. At the beginning of that answer you said
23 finding a counterfactual is difficult and you didn't
24 look for one, right?

25 A. That is correct.

1 Q. And yet without having looked for a
2 counterfactual and recognizing that is not possible,
3 you said that Molycorp could have never secured the
4 necessary financing without the certification?

5 A. That is clear as a bell, right here on the
6 screen. Again, I would like to remind you, the
7 focus of my report was on quantifying the benefits
8 from the Questa site.

9 Q. The focus of your opinion in this case was
10 not about the DMEA?

11 A. Oh, I did mention DMEA but, you know, the
12 core effort in the report was to determine the
13 profitability of the mine, the state and local
14 economic impacts, and the impacts on the overall
15 molybdenum market.

16 Q. So it is not a core opinion that Molycorp
17 could have never secured the necessary financing
18 without the certification?

19 A. I would look upon it as my opinion as an
20 economist based on the data and information I
21 reviewed.

22 Q. Turning to Page 13 of your testimony at
23 the top of that page you say that, "Molycorp
24 borrowed and spent about \$50 million after the
25 certification to prepare the open pit mine for

1 **operation."**

2 **Do you see that?**

3 A. Yes, I do. At the very top of the page?

4 **Q. Yes.**

5 A. Yes.

6 **Q. That is part of your answer?**

7 A. Yes.

8 **Q. None of that money came from the**
9 **United States, right?**

10 A. As far as I know, that's correct, none of
11 it did come from the United States.

12 **Q. Now the figure in your report is**
13 **50 million, but wasn't it more like \$110 million**
14 **that Molycorp spent to develop the open pit mine?**

15 A. Oh, the data that I used for cap X for the
16 mine was based on a ten-year summary of mine
17 performance dated 1975.

18 And in the very first column where cap X
19 prior to 1960, prior to the mine startup. And it
20 was actually 43.06 million, so I don't know where
21 the 110 million is coming from.

22 **Q. I think you used the term cap X, which I**
23 **am not familiar with. Can you explain that?**

24 A. Capital expenditures. Upfront capital
25 expenditures for the construction of the mine and

1 supporting facilities.

2 MR. HOSHIJIMA: Let's pull up USX481,
3 please. This is a document that has been previously
4 admitted.

5 Q. (By Mr. Hoshijima) Do you recognize this
6 as a 1957 Molycorp document entitled Questa Mine and
7 Mill Fact Sheet?

8 A. Correct. It is November 1975. I see to
9 date a total of 110 million has been invested.

10 Q. And you are referring to the top paragraph
11 of this fact sheet?

12 A. Yes.

13 Q. The 110 million that has been invested,
14 this is talking about the open pit mine at Questa,
15 right?

16 A. Wait a minute. You know, actually when I
17 read that paragraph it is kind of ambiguous whether,
18 you know, they are including, you know, capital
19 expenditures prior to the construction of the open
20 pit mine.

21 So, and the other caveat with this number
22 is when I did my profit evaluation and investment
23 evaluation, the 43.06 that I just quoted you a few
24 moments ago, that was for the open pit prior to '66.

25 Subsequent to that the -- there were

1 numbers or expenditures for capital in subsequent
2 years and that is not included in the 43.06 that I
3 quoted you as the upfront expenditures.

4 So, you know, you have to be careful on
5 the numbers and what they include and it is not
6 clear to me, you know, they mention in the first
7 sentence high-grade underground mining operation.
8 Are they including, you know, to date, well, what
9 does that mean, going back to 1920 or 1966? It is
10 not clear to me.

11 And that is sort of the test I used when I
12 did my analysis. I was looking for numbers that
13 were historically accurate and represented actual
14 expenditures over a certain period of time.

15 **Q. Assuming that this 110 million-dollar**
16 **figure includes investments dating back to the**
17 **beginning of the first underground mine operation,**
18 **would all of that money have been Molycorp's private**
19 **finance?**

20 A. Well, that is a big assumption, one, but I
21 will grant you if you assume that, what do you mean
22 by private? I mean, it would be included in their
23 assets and, you know, depreciated over time, and so
24 on. I have no idea if this is a, you know, pre or
25 post-depreciated capital, I don't know what it is.

1 These are the type of numbers I shied away
2 from in my analysis. Usually I focused my analysis
3 based on accounting and financial records from the
4 mine operation.

5 **Q. None of this \$110 million invested in this**
6 **site would have come from the U.S. Government,**
7 **right?**

8 A. Oh, well, there was the DMEA, well that
9 was repaid and that was it, yeah, it was likely.

10 **Q. For \$200,000?**

11 A. Yeah, to the \$250,000.

12 **Q. Other than the DMEA, none of this \$110**
13 **million in investment at the Questa site comes from**
14 **the U.S. Government, right?**

15 A. Right. But I, you know, I really would
16 like to impress upon the Court here that, you know,
17 it is the -- there are a lot of good ideas that
18 aren't monetized, you know, and this idea of
19 searching for a low-grade ore body, convincing a
20 mine that was in operation for more than three
21 decades that they should have a paradigm shift and
22 look elsewhere, have a different view of the mine,
23 was a very important contribution by the USGS and
24 the Bureau of Mines. And that is what those
25 agencies do, they help industry.

1 Q. \$200,000 that the DMEA contributed, that
2 number is less than a quarter of 1 percent of 110
3 million, right?

4 A. Yeah, it is a small number, you know, if
5 you are comparing it to a large number, but, again,
6 I have to reiterate not all great ideas are
7 monetized. In fact, many of the best ideas of all
8 time are not monetized.

9 MR. HOSHIJIMA: I move to strike that
10 answer as nonresponsive.

11 THE COURT: Overruled. You give it to the
12 witness to answer, and he answered.

13 MR. HOSHIJIMA: You can take this down.

14 Q. (By Mr. Hoshijima) Would Molycorp have
15 developed the open pit mine if it did not think it
16 would be profitable?

17 A. No.

18 MR. HOPSON: Objection, calls for
19 speculation.

20 THE COURT: Sustained.

21 Q. (By Mr. Hoshijima) Did Molycorp know that
22 there was a risk that the open pit mine would not be
23 profitable?

24 MR. HOPSON: The same objection.

25 THE COURT: Overruled.

1 A. Please repeat the question.

2 **Q. (By Mr. Hoshijima) Did Molycorp know**
3 **there was a risk that the open pit mine would not be**
4 **profitable?**

5 A. Oh, I have no factual basis to answer that
6 question, I really don't know.

7 **Q. You have no idea if Molycorp knew about**
8 **the risk of a lack of profit at the open pit mine?**

9 A. Well, let me say this: I took a look at
10 the mine feasibility analysis that was discussed and
11 brought up in previous presentations and it is a
12 very long document, lots of numbers. And one thing
13 that was not done, as far as I can tell from a quick
14 scan of the documents, is a risk analysis.

15 And a risk analysis is a fairly
16 complicated mathematical technique where you
17 recognize the uncertainties of certain parameters
18 that guide your investment valuation such as price
19 or cost or stripping, for instance, that was not
20 done. But I am sure that the people who prepare
21 those numbers, especially the people who did the
22 computations had a feel for the sensitivity of the
23 bottom line estimate to certain key consumptions.

24 MR. HOSHIJIMA: Let's pull up USX003.

25 Let's turn to Page 5, please.

1 Q. (By Mr. Hoshijima) Did Molycorp estimate
2 in this SEC filing that the cost of preparing the
3 open pit mine and preparing it for production is
4 approximately 27 and a half million?

5 A. Yes, that is stated in the paragraph, and
6 I recall reading about this and noted that this
7 document was prepared, I believe, in 1964 several
8 years prior to the actual opening of the mine, the
9 open pit mine.

10 Q. To come up with 27 and a half million to
11 develop the open pit mine, Molycorp borrowed a lot
12 of money, right?

13 A. I presume so, but I didn't really look at
14 the debt equity sources of financing. But previous
15 testimony indicated, identified a couple of banks
16 and I would imagine most of this capital was
17 obtained from bank loans.

18 MR. HOSHIJIMA: Let's magnify the last
19 paragraph on this page, please.

20 Q. (By Mr. Hoshijima) Do you see where it
21 says, "As a result of the bank loans and the sale of
22 the debentures offered hereby, the company will
23 incur an aggregate indebtedness of nearly 32 and a
24 half million dollars."

25 A. Yes, I see that.

1 **Q. That was considerably in excess of the**
2 **company's total assets and net worth, correct?**

3 A. That is what the words read, yes.

4 **Q. Is incurring that amount of debt a risky**
5 **thing for a company to do?**

6 A. Well, I am an economist, not a financier,
7 but companies incur debt all the time. Some have
8 very high levels of debt relative to their assets.
9 It varies by the industry.

10 MR. HOSHIJIMA: Turning to the next page
11 of this document. Let's magnify the last paragraph
12 before the heading, Subscription Offer.

13 **Q. (By Mr. Hoshijima) Did Molycorp**
14 **recognize, "The risks inherent in all mining**
15 **venture, many of which risks arise by reason of**
16 **conditions which may be beyond the control of the**
17 **company"?**

18 THE COURT: What is your question?

19 **Q (By Mr. Hoshijima) I am asking if Molycorp**
20 **recognized the risk in 1964 of open pit mining?**

21 A. There is really no basis in my analysis.
22 It really wasn't a focus of my analysis, and it
23 would only be speculative on my part to say whether
24 Molycorp can, as you asked, considered the risks. I
25 am sure they were aware of them but, you know, I

1 can't get inside the heads of the people who were
2 making these decisions back then.

3 Q. In this Molycorp document, Molycorp tells
4 investors to consider these risks, right?

5 A. Yeah, that is what this paragraph is
6 intending to communicate, the inherent risks and
7 these are all accurate that are associated with any
8 mineral investment property.

9 Q. One of the risks listed in this paragraph
10 is a change in economic and general conditions?

11 A. Where are you, on the third line? Yes,
12 okay. Yes.

13 Q. Another risk to Molycorp was, "the
14 development of additional sources of molybdenum and
15 competing metals and products"?

16 A. That's correct.

17 Q. Another risk that Molycorp was aware of
18 was that, "there may be changes in the price and
19 market conditions for molybdenum products"?

20 A. That is what the paragraph reads, yes.

21 Q. And another risk that Molycorp was aware
22 of was that, "construction delays and other factors
23 might affect the capital cost of the project and the
24 cost of mining and production"?

25 A. That is correct.

1 **Q. Despite knowing those risks, Molycorp**
2 **decided to go forward with the open pit mine, right?**

3 A. They made that decision, yes.

4 **Q. They made that decision voluntarily?**

5 A. Yes.

6 **Q. Did that risk pay off?**

7 A. Well, according to my analysis, both the
8 open pit mine and the underground mine lost money.

9 **Q. Did the fact that the business risk did**
10 **not pay off mean that Molycorp should not be**
11 **responsible for environmental consequences?**

12 A. No, I believe Molycorp and Chevron are
13 agreeing to shoulder their share of the cost,
14 whatever is decided.

15 **Q. You opine that Molycorp's open pit mine**
16 **and second underground mine were unprofitable,**
17 **correct?**

18 A. Yeah, that is what my analysis shows.

19 **Q. To reach that conclusion you used a before**
20 **tax cash analysis, correct?**

21 A. Yes. Well, I actually compared that to a
22 GAAP analysis, Generally Approved Account Procedure
23 Analysis, and both methods show that the mine lost
24 money for the open pit.

25 I just did it before tax cash analysis for

1 the second underground mine.

2 **Q. The approach you discuss in your direct**
3 **testimony is just the before-tax approach, correct?**

4 A. Well, I recommend that approach but I do
5 present by way of comparison the conventional
6 approach where you capitalize stripping costs, and
7 other costs.

8 **Q. Does that analysis take into account any**
9 **impacts of taxes on the economics of the open pit**
10 **mine?**

11 A. No. I used the convention in mineral
12 economics that projects are evaluated on a
13 before-tax basis.

14 **Q. A company can sometimes use losses to**
15 **offset tax liabilities, correct?**

16 A. That is correct, however, like I said, the
17 convention in mineral economics is to look at,
18 essentially, the cash flow. How much money is
19 coming in the door to support the operation and how
20 much money is going out the door to run the
21 operation. And that is kind of the gold standard in
22 financial analysis.

23 In fact, a lot financial analysts today
24 look at tech companies the same way. Tech company
25 may look good on an after-tax basis, but when you

1 look at it on a tax -- on a before-tax cash flow
2 basis, it may not look so good. So really kind of
3 gives you a true picture of the cash generating
4 capability of the enterprise.

5 **Q. Let me be clear. The approach you used**
6 **did not take into account the tax effects?**

7 A. That is correct.

8 **Q. Did Molycorp have other --**

9 A. I have a caveat on that, only to the
10 extent my subsequent analysis, I did in the economic
11 impacts track the taxes that Molycorp paid for
12 concentrate Social Security taxes, and state and
13 local taxes.

14 **Q. Did Molycorp, and we are talking about the**
15 **open pit mine period, have other assets other than**
16 **at Questa that might have resulted in taxable income**
17 **even when it was taking a loss at Questa?**

18 A. Yeah, that is possible, but, again, the
19 question that I focused on in my study was what was
20 the financial viability of the Questa Mine because
21 the focus here is who is going to pay for the cost
22 of environmental remediation.

23 So Questa, the operators of Questa and its
24 financial viability at the mine was the core issue.

25 MR. HOSHIJIMA: Let's turn to CX123,

1 please. Let's turn to the next page after this.

2 Q. (By Mr. Hoshijima) Do you see this is
3 Molycorp's 1963 annual report?

4 A. That is indicated on the top left, yes.

5 MR. HOSHIJIMA: I move to admit CX123.

6 MR. HOPSON: No objection, Your Honor.

7 THE COURT: With that objection, 123 is
8 admitted.

9 (Exhibit admitted, CX123.)

10 Q. (By Mr. Hoshijima) This annual report is
11 from 1963 which is why Molycorp is developing the
12 open pit mine, correct?

13 A. Yes.

14 MR. HOSHIJIMA: Let's magnify the third
15 paragraph under Financial. The paragraph above
16 that, please.

17 Q (By Mr. Hoshijima) This report by Molycorp
18 says that in 1963, which was just before it started
19 the open pit mine, the company's financial condition
20 was the strongest in its history, correct?

21 A. That is what it says, yeah.

22 MR. HOSHIJIMA: Let's take down that call
23 out and pull up the last paragraph under Financial.

24 Q. (By Mr. Hoshijima) Do you see where it
25 says that Molycorp took the exploration and

1 development expenditures at the Questa site and
2 deducted it for income tax purposes and eliminated
3 the entire 1963 income tax liability for the parent
4 company?

5 A. Yes, that is what it says.

6 Q. Well, Molycorp benefited financially as a
7 company as a whole from this particular expense,
8 right?

9 A. That is what the passage says, yes, that's
10 correct.

11 Q. In fact, not only did Molycorp use its
12 exploration expenditures at the open pit mine to
13 write off its entire 1963 income tax liability, but
14 it also got refunds for income taxes for prior
15 years, correct?

16 A. Yeah. That is explained by our tax laws.

17 Q. Your analysis, though, was that before tax
18 analysis, which did not take into account this sort
19 of thing, correct?

20 A. That's correct because, again, I was
21 focused on the economic viability of the Questa Mine
22 and I did not have the detailed data that would be
23 required to do a complete disaggregation and
24 allocation of any sort of tax benefits recognizing
25 that this was a multi-product operation. It was a

1 very complicated accounting exercise, essentially.
2 There was no breakouts of, you know, cash flow from
3 rare earths and the other enterprises that Molycorp
4 had. And, again, the convention in mineral
5 economics is to look at projects on a before-tax
6 basis because taxes can get very complicated, they
7 vary by jurisdiction, you know, country by country,
8 state by state, depletion allowances and so on. So
9 it is hard to get an apples to apples comparison of
10 projects.

11 Q. Taking you back to the beginning of that
12 answer, you did not do the detailed analysis that
13 would have been necessary to say whether the
14 Molycorp company as a whole benefited financially
15 monetarily from the Questa Mine, right?

16 A. Yes. And the reason I didn't is I didn't
17 have the data.

18 Q. To clarify, when you said yes, did you not
19 do that detailed analysis, correct?

20 A. I did not do the detailed analysis.

21 THE COURT: He said that, Counsel, four or
22 five times.

23 Q. (By Mr. Hoshijima) You opined that the
24 Questa open pit mine was not profitable for two main
25 reasons, correct?

1 A. Yes.

2 Q. The first of those was that it encountered
3 higher than expected stripping costs, correct?

4 A. Correct.

5 Q. Was the second that they had fluctuations
6 in places?

7 A. I believe I said in my report that when
8 prices eventually went up in the mid-'70s production
9 at Questa's open pit mine was declining. So they
10 were sort of at the -- sort of an unfortunate
11 sequence of events where their production in the
12 open pit was declining and they weren't able to
13 capture additional revenues. Prices soared in the
14 late '70s to offset their prior losses.

15 Q. Let's put that aside and start with your
16 first reason, which has to do with stripping costs?

17 A. Yes.

18 Q. Before developing the open pit mine,
19 Molycorp estimated what it felt its costs would be,
20 right?

21 A. Yes. I did previously mention the
22 feasibility report and in that report, estimated
23 costs were projected.

24 Q. But much more than Molycorp expected had
25 to do with the move to open pit mine?

1 A. That is correct.

2 **Q. That is because it encountered an**
3 **instability in the west wall of the open pit mine?**

4 A. Again, I am not a mining engineer. I was
5 just looking at the numbers and I saw the stripping
6 costs jump up and I was just looking at the cost
7 numbers. I didn't look at the causation.

8 **Q. You don't know what caused the increased**
9 **stripping costs in the mid-1960s?**

10 A. I said through the previous testimony, I
11 think it is pretty clear that there was some sort
12 of, you know, slide, whatever you want to call it,
13 technical term. It just said we moved more earth
14 which meant more diesel fuel costs and equipment
15 time and labor to move all the material. And that
16 showed up in my cost numbers.

17 **Q. When the stripping costs increased above**
18 **what was initially anticipated, Molycorp decided to**
19 **continue open pit mining anyway, right?**

20 A. The record shows that production continued
21 from 1966 through 1981.

22 **Q. Even though Molycorp knew that decision**
23 **would result in far more waste rock having to be**
24 **disposed?**

25 A. Yeah, I just looked at the numbers.

1 Again, you know, I just took it as a given. I
2 didn't really make any connection with their
3 operational decisions and whether or not they should
4 have pursued it.

5 Q. The instability that Molycorp encountered
6 that resulted in these increased stripping costs, is
7 that the kind of risk that Molycorp knew about
8 before it started open pit mining?

9 A. Oh, I can't speak for the engineers and
10 the project managers. It certainly was a
11 discontinuous event there. I can't recall the exact
12 year, I think it was '69 or '70 where stripping
13 costs jumped up very abruptly and that looks to me
14 like a surprise, excuse me.

15 Q. Isn't that kind of unexpected geological
16 finding the exact kind of risk that Molycorp
17 described in that SEC document we saw earlier?

18 A. Yeah, it would be consistent with that,
19 but those, I mean, things happen.

20 Q. You testified also that operating profits
21 started falling significantly starting 1977,
22 correct?

23 A. Yeah, I believe that is the -- your
24 question was operating profit or costs?

25 Q. Operating profits.

1 A. Operating profits, yeah, it looked like
2 they really started going down in 1977, you are
3 right.

4 **Q. Was that the same year that there was a**
5 **massive rock slide in the open pit mine that shut**
6 **off half of the pit's capacity?**

7 A. You know, I really didn't track that. I
8 mean, I heard about the slide, but I was really kind
9 of focused on the numbers and just took them. I
10 didn't think it was important to pull in my
11 analysis, I don't know.

12 MR. HOSHIJIMA: Could we pull up Dewey
13 direct exam, PDF Pages 17 to 18. The Dewey direct
14 exam. Let's go down another page, bottom of Page 18
15 to 19, please. Let's expand the answer starting
16 with, "Yes, when the company signed." I'm sorry,
17 that's not the right one. Let's take it off. Let's
18 take down this document.

19 **Q. (By Mr. Hoshijima) You also analyzed the**
20 **profitability of the second underground mine, right?**

21 A. Yes, sir.

22 **Q. Is Molycorp's decision to shift the mining**
23 **back underground?**

24 A. Pardon?

25 **Q. Was it Molycorp's decision to shift the**

1 **mining back underground?**

2 A. Yes.

3 Q. Did Molycorp incur a capital cost of
4 **developing the second underground mine of**
5 **\$250 million?**

6 A. Yes.

7 Q. None of that came from the United States,
8 **right?**

9 A. Correct.

10 Q. By then, though, the molybdenum prices had
11 **dropped, right?**

12 A. What year?

13 Q. 1983 when the second underground mine
14 **started production.**

15 A. Yes, yes 1983, yeah.

16 Q. You opine later in your direct testimony
17 **that the Government sales from the stockpile could**
18 **have affected the market prices of molybdenum?**

19 A. Yes. I did a market simulation of during
20 the period, I think, it was 19- -- in the '60s
21 through the mid-'70s the stockpile for molybdenum
22 was eliminated by 1975. And, yes, I presented
23 evidence that showed that the sales from the
24 stockpile reduced market prices.

25 Q. The last sale was 1975, so that would have

1 **nothing to do with the unprofitability of the second**
2 **underground mine, right?**

3 A. That's correct.

4 **Q. You didn't analyze the current financial**
5 **status of Chevron, did you?**

6 A. You mean in 2020?

7 MR. HOPSON: Objection, relevance of
8 Chevron's current financial situation.

9 THE COURT: Sustained.

10 **Q (By Mr. Hoshijima) Does Molycorp now own**
11 **the property at the Questa Mine?**

12 A. My understanding, I visited it a few years
13 ago, Chevron owns the property and there is
14 facilities operating there.

15 **Q. Chevron owns the property, not Molycorp?**

16 A. Yeah.

17 **Q. Chevron would benefit from any future**
18 **increases in the value of the property once it is**
19 **cleaned up, correct?**

20 A. Yeah, I presume so if they are the owner.
21 As the previous witnesses have described, there is
22 kind after complex mosaic of landownership because
23 you are in a forest land and BLM land, so I am not
24 sure what the footprint is.

25 MR. HOSHIJIMA: Let's pull up CX487,

1 please.

2 Q. (By Mr. Hoshijima) Is this a figure from
3 your direct testimony that shows your estimate of
4 labor income from the open pit mine?

5 A. Yes, yes.

6 Q. In the first column the wages and salaries
7 were paid to Molycorp employees, right?

8 A. Correct.

9 Q. Employees like Mr. Dewey?

10 A. I am not sure if Mr. Dewey is still
11 working with Molycorp.

12 Q. These wages and salaries weren't paid to
13 the United States, were they?

14 A. No, they are paid to individuals who paid
15 taxes to the United States.

16 Q. The second column, benefits.

17 A. Yes.

18 Q. Is that referring to benefits to Molycorp
19 employees like pensions, vacation and health
20 insurance?

21 A. Yes.

22 Q. Those numbers in that second column, they
23 are not paid to the United States, are they?

24 A. Well, every employee that's supported by
25 health care is one less employee that has to be

1 supported by the Government.

2 Q. Looking at the indirect column, indirect
3 income in the fourth column.

4 A. Yes.

5 Q. Do those values represent Molycorp's
6 purchases of goods and services from other local
7 businesses?

8 A. Yeah, they are so-called supply chain or
9 indirect impacts.

10 Q. The numbers in that column aren't figures
11 paid to the United States, correct?

12 A. Not directly, but there are indirect
13 impacts on the finances of all levels of Government,
14 because any business activity generates tax revenue.

15 Q. Specifically the numbers in the fourth
16 column of your figure represent dollar amounts paid
17 to other businesses in the area, right?

18 A. It is labor income, yes, from supporting
19 industries, that is correct.

20 MR. HOSHIJIMA: Let's turn to CX488, which
21 is a figure cited in your direct exam.

22 Q. (By Mr. Hoshijima) This is a table of
23 state and local taxes resulting from the open pit
24 mine, correct?

25 A. Yes.

1 **Q. These numbers are paid to the State of**
2 **New Mexico and the county?**

3 A. Yeah, and any other special districts like
4 fire, schools, you know, every municipality has a
5 different arrangement of those.

6 **Q. None of these numbers in this figure**
7 **represent numbers paid to the Federal Government,**
8 **right?**

9 A. Yeah, the table is entitled State and
10 Local Taxes. That is correct.

11 **Q. Let's turn to Federal taxes. The**
12 **United States did not tax Molycorp any differently**
13 **from any other business, did it?**

14 A. I don't believe so. I didn't see any
15 special provisions I just see --

16 MR. HOSHIJIMA: Let's turn to CX489.

17 **Q. (By Mr. Hoshijima) Is this your estimate**
18 **of Federal taxes resulting from the open pit mine?**

19 A. Yes, it is.

20 **Q. The first column is labeled FICA.**
21 **Do you see that?**

22 A. Yes.

23 **Q. Are those FICA taxes that fund Social**
24 **Security and Medicare?**

25 A. Yeah, those are the employer and employee

1 contributions to social insurance.

2 Q. These numbers aren't numbers that go into
3 the Government's general treasury, right?

4 A. Well, Social Security is a major
5 entitlement program that is part of the Federal
6 budget so, yes, they are.

7 Q. The second column unemployment?

8 A. Yeah.

9 Q. Those represent the amounts paid for
10 funding Federal unemployment benefits?

11 A. Yes.

12 Q. The benefits would go, then, to all
13 recipients of unemployment benefits?

14 A. Yes.

15 Q. The other Federal taxes that Molycorp
16 paid, do they go to various Government benefits and
17 services like highways and national defense?

18 A. Would you rephrase that question or state
19 it again, please.

20 Q. The other Federal taxes that Molycorp
21 paid, do they go to funding Government benefits like
22 national defense and highways?

23 A. Yeah, that is what all of our tax, that is
24 what we do when we pay taxes, we are paying for
25 public goods that the Government provides, like

1 national defense.

2 Q. Molycorp benefited from all of that,
3 correct?

4 A. Yeah, as we all do.

5 Q. Let's turn to the part of your testimony
6 where you talk about economic benefits created for
7 consumers.

8 A. Okay.

9 Q. Your opinion is that the Questa Mine
10 created savings for purchasers of molybdenum,
11 correct?

12 A. Yes.

13 Q. You also say, though, that the Government
14 was not a purchaser of molybdenum, correct?

15 A. The main -- not a direct purchaser, but
16 the main users of molybdenum are ferro and stainless
17 steel producers. And they produce products that are
18 bought by General Motors, Caterpillar tractor,
19 General Dynamics that make submarines and aircraft
20 carriers. And, again, that is part of the supply
21 chain and so I think this distinction about, you
22 know, who buys directly is splitting hairs.

23 The Government in providing national
24 defense for everyone, as you have mentioned, has to
25 buy big capital goods that are made out of steel,

1 and a lot of those goods, particularly in defense,
2 have molybdenum in them because they have certain
3 physical properties that are unique to defense
4 equipment.

5 Q. The direct purchasers of molybdenum are
6 generally private steel companies, correct?

7 A. It is my understanding, yes.

8 Q. Who then sell the steel to many companies,
9 like you said, Caterpillar, other --

10 A. Thousands of different companies, yes.

11 Q. Because molybdenum containing steel has a
12 lot of applications in the private industry,
13 correct?

14 A. Private and defense industries.

15 Q. In fact, molybdenum containing steel is
16 used in mining equipment, correct?

17 A. I guess so, I don't know the details. We
18 have another expert coming up that probably could
19 speak to that.

20 Q. Going further down in your direct
21 testimony you say that the Questa open pit mine had
22 a significant impact on molybdenum market prices,
23 correct?

24 A. The operation of the open pit mine?

25 Q. Yes.

1 A. Yes.

2 Q. And you do that based on an economic model
3 that you applied in this case?

4 A. Right. Simple supply and demand.

5 Q. In explaining that model in your direct
6 testimony, you explained that in a competitive
7 market with many producers, any one producer would
8 not have a significant impact on market prices,
9 correct?

10 A. Right, because there would be thousands,
11 maybe millions of individual firms.

12 Q. It is when there is a dominant producer
13 that can charge a monopoly price that your analysis
14 results in finding impacts to market prices?

15 A. Well, my analysis applies to both, really
16 empirically, but the -- you raise a good point about
17 the unique features of the molybdenum market.

18 Historically it has been dominated, was
19 dominated by one firm, Climax. And, in fact, in
20 1960 Climax produced 85 percent of the molybdenum in
21 the United States. And there was a concern in the
22 Department of Justice about the competitive
23 consequences of that because there are other
24 examples and other industries where a dominant firm,
25 like Standard Oil 100 years prior, exerted their

1 market power and was found to be in violation of
2 antitrust laws.

3 MR. HOSHIJIMA: Let's pull up CX105.

4 Q. (By Mr. Hoshijima) Is this the 1960
5 report that you were referring to?

6 A. Yes.

7 MR. HOSHIJIMA: Let's go to Page 5.

8 Q. (By Mr. Hoshijima) Do you see in the
9 second paragraph where it says that, "As of 1960
10 much of the total supplier of molybdenum comes as a
11 byproduct of copper and tungsten"?

12 A. Well, I see molybdenum's direct production
13 is associated with byproducts and much of the total
14 supply comes as a byproduct of copper and tungsten.

15 Q. Do you understand that to mean that
16 molybdenum is produced as a byproduct by copper
17 companies that are mining copper?

18 A. Yes, and that is the structure of the
19 market. There is a dominant firm, Climax, with a
20 market share that varies, as I have mentioned, from
21 a high of 85 to 35, 40 percent.

22 And then there is Questa that is coming in
23 and out of the market over the decades.

24 And then there is the byproduct producers
25 of molybdenum who are primarily in the business of

1 producing copper and tungsten and they respond to
2 incentives in that market, not the molybdenum
3 market.

4 MR. HOSHIJIMA: Let's take out, let's
5 remove this magnification. Let's look at the bottom
6 of the page where it describes Climax, the one
7 dominant primary producer of molybdenum. That is
8 what you have been discussing, correct?

9 A. That's correct.

10 Q. The report then goes on to say, though,
11 that, "Climax's position appears somewhat mitigated
12 by the emergence of important byproduct production
13 of molybdenum by copper companies."

14 Is that correct?

15 A. That is correct and it is important and I
16 would underline somewhat mitigated, that is, to us
17 and I read that, that there are limitations to that
18 mitigation.

19 MR. HOSHIJIMA: Let's go two more pages
20 forward in this report.

21 Q. (By Mr. Hoshijima) Do you see in the
22 second paragraph where it says that, "From a third
23 to a half of molybdenum has been produced as a
24 byproduct of copper and tungsten production"?

25 A. Yes.

1 Q. And that the copper producers, at times
2 when there is less demand for molybdenum, can skip
3 that byproduct production of molybdenum.

4 Do you see that?

5 A. Yes.

6 Q. That means on the flip side, do you see
7 where it says, "There is great flexibility in the
8 molybdenum market"?

9 A. Yes, I see that.

10 Q. So in times of less demand the copper
11 companies might not make as much byproduct
12 molybdenum but conversely when demand increases
13 copper companies can fill that void?

14 A. That is what the implication is, I agree
15 with that. But I might add if, I don't know where
16 you are going with this, but if you read on in the
17 document at the very end of the document, I think
18 this is written by the Attorney General of the
19 United States. He says that there is some concern
20 about the competition in the market with such a
21 dominant producer, so byproduct producers, they kind
22 of come and go in the market, primarily dependent on
23 market conditions in their market, not necessarily
24 molybdenum.

25 So it is not a guarantee that in times of

1 lean demand copper producers may omit processing of
2 byproduct molybdenum. It really kind of depends on
3 what is happening in copper and tungsten because
4 that is their main line of business.

5 MR. HOSHIJIMA: Let's turn to Page 8 of
6 this report. PDF Page 11.

7 Q. (By Mr. Hoshijima) This part of the
8 report further discusses those copper companies that
9 produce molybdenum as a byproduct, correct?

10 A. Yes.

11 Q. It says that an important source that is
12 more recently developed as of this 1960 report is
13 molybdenum bearing copper ores?

14 A. Correct.

15 Q. Further down in that paragraph do you see
16 how it says that the amount of byproduct production
17 of molybdenum from copper companies may fluctuate as
18 a factor of, and one of the factors it lists is the
19 demand for molybdenum justifying the costs of its
20 separate extraction?

21 A. I see that.

22 Q. So it is saying that when demand for
23 molybdenum goes up, that might make it more
24 worthwhile for some of these copper companies to
25 produce molybdenum as a byproduct?

1 A. If the level of prices in the copper
2 market justifies the level of copper production.

3 THE COURT: Counsel, would this be a good
4 time to take our afternoon break?

5 MR. HOSHIJIMA: Yes, Your Honor.

6 THE COURT: Thank you. We will be in
7 recess for 15 minutes.

8 (A recess was taken.)

9 THE COURT: You may be seated.

10 Q (BY Mr. Hoshijima) Dr. Considine, before
11 the break you recall we were talking about this 1960
12 Government report, correct?

13 A. Yes, sir.

14 Q. We were talking about the recent
15 development of molybdenum bearing copper ores?

16 A. You mean the byproduct?

17 Q. Yes.

18 A. Yes.

19 Q. Do you see near the bottom of this page
20 where it discusses how Kennecott Copper Company is
21 the largest byproduct producer?

22 A. Yes.

23 Q. You have heard that company name come up a
24 number of times in this trial, but Kennecott
25 operates one of the largest open pit mining ventures

1 in the world, correct?

2 A. Yes, I see this.

3 Q. That is a source for byproduct molybdenum
4 production?

5 A. Yes.

6 MR. HOSHIJIMA: Let's turn to PDF Page 14.

7 Q. (By Mr. Hoshijima) Looking at the second
8 paragraph, do you see how, as of 1960 -- and again
9 this is before the start of the open pit mine --
10 this report says that commercially recoverable
11 reserves are estimated as sufficient for 50-year
12 supply?

13 A. That is what the passage reads, yes.

14 MR. HOSHIJIMA: Let's turn to PDF Page 21.

15 Q. (By Mr. Hoshijima) Do you see that in
16 1950 there were four companies involved in byproduct
17 production of molybdenum?

18 A. Yes, that is what the first sentence
19 indicates.

20 Q. Midway through that paragraph it describes
21 how by the end of that decade there were nine
22 companies doing that, correct?

23 A. Correct.

24 MR. HOSHIJIMA: Turning to PDF Page 33.

25 Q. (By Mr. Hoshijima) First paragraph under

1 Competitive Effect, do you see how it says that,
2 "Molybdenum byproduct occurrence and copper ores
3 provides a considerable degree of reserve capacity
4 for expended production"?

5 A. Yes, that is what it indicates.

6 Q. That is referring, again, to the idea that
7 copper companies could increase their byproduct
8 production of molybdenum if there is demand, right?

9 A. It could, but as I cautioned before the
10 break, there is actually two factors involved in the
11 supply from byproduct producers of molybdenum. It
12 would be the price of the main product and the price
13 of molybdenum.

14 Q. This 1960 report, after discussing the
15 byproduct production of molybdenum, says that, "a
16 real shortage of molybdenum is unlikely," correct?

17 A. That is what it reads. That is correct.

18 MR. HOSHIJIMA: We can take this document
19 down.

20 Q. (By Mr. Hoshijima) When molybdenum is
21 added to steel, molybdenum is about 1 percent of the
22 ultimate product, right?

23 A. I am not a metallurgist, so I can't opine
24 on that.

25 Q. So you don't know how much of molybdenum

1 **ends up in the final steel product?**

2 A. I have done studies on tracking
3 ferroalloys into alloy and stainless steel
4 production on tonnage basis, but I don't know, you
5 know, the percent contents off the top of my head.

6 **Q. The analysis you did for your direct**
7 **testimony was about the impact of the Questa Mine on**
8 **the market prices of molybdenum, right?**

9 A. That is right, molybdenum concentrate.

10 **Q. You did not analyze how much the Questa**
11 **Mine production would have affected the price of**
12 **steel?**

13 A. No, I didn't look at that.

14 **Q. The purchasers of molybdenum, again, were**
15 **private steel companies, right?**

16 A. For the most part. There are many
17 different uses, chemicals and other nondurable
18 products use molybdenum powders, and so on. I
19 didn't really do a detailed end use analysis in my
20 report, I just looked at the market for molybdenum
21 concentrate and the impacts that the stockpile sales
22 and Questa production had on the price.

23 **Q. That price reduction would have gone to**
24 **the benefit of the private steel companies, right?**

25 A. As I have mentioned before, that is

1 correct, that would lower the cost of producing
2 goods, primarily capital goods that contain
3 molybdenum bearing steel.

4 Q. If it were the case that molybdenum makes
5 up about 1 percent of steel, does that mean that the
6 price impacts would not really be felt by the
7 consumers of steel?

8 A. Well, I compute the consumer cost savings
9 from lower molybdenum prices from -- that results
10 from the Questa production and those numbers are
11 reported in the report. And they amount to hundreds
12 of millions, billions of dollars over the entire
13 mining period, so they are worthy to take note.
14 Granted they are a small fraction of the overall
15 economy and overall steel use, but every little bit
16 helps.

17 Q. In your direct testimony you describe the
18 Federal Government's stockpile of molybdenum,
19 correct?

20 A. Yes.

21 MR. HOSHIJIMA: Let's turn to Page 42 of
22 your testimony.

23 Q. (By Mr. Hoshijima) You say that, "Because
24 Questa represented a new and significant source of
25 molybdenum, Questa reduced the United States

1 **Government's need for the strategic stockpile"?**

2 A. Yes, I noted that the United States sold
3 27.6 million pounds of molybdenum from the strategic
4 stockpile just prior to the startup of the Questa
5 open pit mine.

6 Q. When you referred to the new and
7 significant sources of molybdenum, you are talking
8 about the open pit mine starting in 1965, right?

9 A. Yes.

10 Q. Your opinion is that that open pit mine is
11 what allowed the Government to start selling
12 molybdenum from the stockpile?

13 A. I pointed that out and, you know, there
14 are a lot of -- any economic decision made by the
15 Government or market entails many factors, and this
16 could have been one of them because it was
17 significant because Questa was a primary producer.

18 All of the other, there was Climax as a
19 primary producer, now the United States had another
20 second significant primary producer producing
21 roughly 10 percent of the market of total
22 production, and then the byproduct producers,
23 further diversifying and adding to the flexibility
24 in the market, which I think is a good thing.

25 MR. HOSHIJIMA: Let's turn to USX053 on

1 Page 134. This exhibit has been previously
2 admitted.

3 Q. (By Mr. Hoshijima) Do you see that it
4 represents the national stockpile goals plotted
5 against their inventories?

6 A. Yes, the inventory levels are the Xs and
7 the goals are the plus signs.

8 Q. This is for molybdenum disulfide?

9 A. Yes.

10 Q. Do you see that it is about 1958 that the
11 inventories, which again are shown with the plus
12 marks, are -- sorry, strike that.

13 Do you see that it is about 1958 when the
14 inventories, which are represented by the X mark,
15 meets the goal for the stockpiling of molybdenum?

16 A. Yeah, they may be a few years earlier it
17 intersects at that point.

18 Q. Certainly years before Molycorp opened the
19 open pit mine, correct?

20 A. Yeah, I think it is important to keep in
21 mind what else was happening at the period. And if
22 you look at Climax production in particular during
23 the 1950s, it increased dramatically.

24 Q. So Climax's production, not the Questa
25 open pit mine, is what allowed the Government to

1 **meet its stockpile goals?**

2 A. I didn't say that. I think it is a
3 contributing factor. There are a lot of other
4 factors in the management of the stockpile. It is
5 not just the supply, but the anticipated demand and
6 the probability. The whole point of owning a
7 stockpile, and this is what the Defense Department
8 and other Government agencies do, is they, they war
9 game it, you know. They think, okay, what happens
10 if we fight, for instance, World War III, which was
11 a real concern at this time, how much material would
12 we need. So the demand in both the supply side
13 considerations are, I think, likely taken into
14 account.

15 **Q. Even if a lot of factors are taken into**
16 **account, how could it be that the Questa open pit**
17 **mine production is one of those factors if 1958 is**
18 **before the DMEA even certifies a discovery?**

19 A. Well, I think it is just the simple idea
20 that Government concerned about the availability of
21 materials keeps in mind that there -- they are
22 trying to develop a diverse portfolio of assets and
23 Questa would fit into that strategy.

24 MR. HOSHIJIMA: Let's look at USX081,
25 which has been previously admitted.

1 Q. (By Mr. Hoshijima) Do you see this as a
2 January to June 1956 stockpile report to Congress?

3 A. Yes, yes.

4 MR. HOSHIJIMA: Let's turn to Page 24.

5 Q. (By Mr. Hoshijima) There is a section on
6 molybdenum on the top left of the page.

7 Do you see that?

8 A. Yes.

9 Q. Again, this is in a 1956 report. Do you
10 see how, because of an improved defense position for
11 molybdenum, the Government actually instead of
12 receiving deliveries to the stockpile deferred them
13 to private industry?

14 A. I see those words, yes.

15 Q. 1956, which is nearly ten years before
16 open pit production, the Government no longer needs
17 these deliveries to the stockpile, correct?

18 A. Well, the future is important to consider,
19 but the past is as well. And the thing to keep in
20 mind here is the United States just finished
21 fighting the Korean War and there were major
22 problems in the steel industry. And maybe some of
23 those problems have -- were resolved at this time.

24 So I would ask, and I am not sure here,
25 what the improved defense position for molybdenum

1 actually is. It is not really explained here.

2 Q. Whatever it is, though, it doesn't have
3 anything to do with what Molycorp is doing in
4 Questa, right?

5 A. Well, when was this, in '56, this
6 document?

7 Q. Yes.

8 A. Well, like I said, you know, this is part
9 of what stockpiling programs do is they try to look
10 around the world for sources of supply in
11 anticipation of future demand. And for this
12 particular material, that defense scenario would
13 play prominently.

14 Q. This document near the end of this
15 paragraph notes, "The capacity of domestic producers
16 in Colorado and Arizona," when it talks about the
17 stockpile being met, right?

18 A. Well, it is just saying that capacity of
19 domestic producers in Colorado and Arizona is being
20 increased, presumably. Well, that is the byproduct
21 producers part of this diversified portfolio.

22 Q. No mention in this paragraph of production
23 in Questa, New Mexico, that would allow the
24 Government to defer deliveries to the stockpile,
25 right?

1 A. Right. This is 1956 and what the DMEA
2 loan really started, I guess, they started work in
3 '57, so this is before then, yeah.

4 **Q. This is before the DMEA contract is even**
5 **signed, correct?**

6 A. Yeah.

7 MR. HOSHIJIMA: Let's pull up USX539.
8 This has been previously admitted.

9 **Q. (By Mr. Hoshijima) Do you see that it is**
10 **the January to June 1957 stockpile report?**

11 A. I do.

12 MR. HOSHIJIMA: Let's turn to Page 10.

13 THE COURT: Counsel, can I inquire as to
14 where you are going with this year by year hour per
15 hour? It seems irrelevant to what we are here for.

16 MR. HOSHIJIMA: This is one more document
17 about the state of molybdenum in the United States
18 when Molycorp is seeking the DMEA loan.

19 THE COURT: Well, so what?

20 MR. HOSHIJIMA: Chevron is arguing that
21 the Government had a significant defense interest in
22 molybdenum at that point in time.

23 THE COURT: Well, there was a comment
24 there. I think it has been covered over and over
25 again.

1 MR. HOSHIJIMA: I will move on.

2 Q (By Mr. Hoshijima) The Government
3 eventually sold off excess molybdenum from the
4 national stockpile, right?

5 A. Yes.

6 Q. We saw that it was in 1958 when its
7 inventory was met?

8 A. Well, that is where the goals intersected
9 with the inventory levels.

10 Q. When the goals were met?

11 A. Yeah.

12 Q. But it is actually not until 1975 that the
13 last bit of molybdenum is sold off from the
14 stockpile, right?

15 A. That is what the historical record
16 indicates, yes.

17 Q. That is because the Government took its
18 time to make those sales so it didn't flood the
19 market, correct?

20 A. Yeah, that is always a concern with the
21 drawdown of a stockpile.

22 Q. The Government --

23 A. Unless it is intended, for instance, for
24 example in the case of oil.

25 Q. To avoid disrupting the market, then, the

1 **Government, even after the stockpile inventory goal**
2 **had been met, took its time releasing molybdenum**
3 **from the stockpile, right?**

4 A. Well, that wasn't really a focus of my
5 analysis. I just took the numbers as they were to
6 make a judgment call of whether that was the best
7 route, I don't know, I can't really make that
8 judgment.

9 Q. **Final topic, then, you discuss sales of**
10 **molybdenum from the stockpile in your direct**
11 **testimony, correct?**

12 A. Yes.

13 Q. **Are you aware that Molycorp was a**
14 **purchaser of molybdenum from the national stockpile?**

15 A. I believe so. It is not clear to me, but
16 I will grant you that.

17 MR. HOSHIJIMA: Let's pull up USX098.
18 This has been previously admitted.

19 Q. **(By Mr. Hoshijima) Do you see this is a**
20 **1964 GSA news release?**

21 A. I do.

22 Q. **Do you see that Molycorp has bid for sale**
23 **of molybdenum from the stockpile?**

24 A. That is what it indicates, yes.

25 Q. **Molycorp was awarded a bid, right?**

1 A. Yeah, awards went to three bidders and
2 there they are.

3 **Q. Molycorp then benefited from sales of**
4 **molybdenum from the stockpile, right?**

5 A. Behind every side of the sale there are
6 two winners, the seller and the buyer. Yeah, they
7 were probably buying this molybdenum to hoist in
8 there processing facilities.

9 MR. HOSHIJIMA: USX103, please. This has
10 been previously admitted.

11 **Q. (By Mr. Hoshijima) Do you see it is a**
12 **1969 GSA news release?**

13 A. Yes.

14 **Q. Do you see that again in 1969 Molycorp is**
15 **purchasing molybdenum from the national stockpile?**

16 A. Yes. And I interpret this as just the
17 likely fact that they had excess capacity to process
18 molybdenum and they saw it in their best interest to
19 pursue this opportunity.

20 **Q. And the Government didn't need it at that**
21 **time, right?**

22 A. Well, that is implied. They are selling
23 it, so if you sell something you want to get rid of
24 it, yes.

25 MR. HOSHIJIMA: I have no further

1 questions.

2 THE COURT: Thank you. You may redirect.

3 MR. HOPSON: Yes, Your Honor.

4 Good afternoon, Your Honor.

5 THE COURT: Good afternoon.

6 REDIRECT EXAMINATION

7 BY MR. HOPSON:

8 Q. You are currently an economist at the
9 School of Energy Resources at the University of
10 Wyoming, right?

11 A. Yes.

12 Q. And prior to that time you spent some time
13 at Penn State focusing on mineral economics, right?

14 A. That's correct.

15 Q. So are you familiar with issues around
16 valuing, evaluating and seeking mine financing?

17 A. Somewhat. I don't have direct experience
18 in that, but, yeah, I have rubbed elbows with a lot
19 of people who have written programs that support
20 that activity.

21 Q. I believe you said that when you did your
22 analysis you used before-tax cash flow for a reason.
23 What was the reason?

24 A. The reason is that it is considered the
25 gold standard of mineral project evaluation and it

1 strips away all the complexities and distortions of
2 the tax code. So you really want to make your
3 investment decision based on the cash generating
4 capability of the project.

5 MR. HOPSON: We saw, and I am going to ask
6 Ms. Hutchman to put up Chevron Exhibit 123, which is
7 the 1963 annual report.

8 Q. (By Mr. Hopson) Do you remember looking
9 at that?

10 A. Yeah.

11 Q. Let me see if I can do it without the
12 document, make it quicker.

13 A. Okay.

14 Q. You were shown some information that
15 suggested that the benefits of the tax deduction
16 were substantial in one year, that is, the tax
17 deduction for capital appreciation to Questa, yes?

18 A. Yes.

19 Q. Have you seen that for any other year
20 during the operation of the mine?

21 A. I did not.

22 Q. You are familiar as an economist with the
23 timeline of what happened at the Questa Mine,
24 correct?

25 A. Yes.

1 **Q. And in December of 1956 at the time that**
2 **Molycorp was applying for assistance from the**
3 **United States Government, what was the state of**
4 **their reserves?**

5 A. They were essentially tapped out of
6 molybdenum at the Questa site.

7 **Q. Were they in production?**

8 A. No. I believe they shut down somewhere,
9 sometime in 1956 or '57.

10 **Q. Did they have any planned exploration?**

11 A. No. In fact, one document indicated
12 explicitly that they had no plans to conduct further
13 exploration.

14 **Q. In your experience with mine financing and**
15 **mineral economics, is it likely a private lender,**
16 **like a bank, would have loaned money for exploration**
17 **at the Questa site given the mineral economics on**
18 **the ground?**

19 A. I think it would be unlikely because
20 there -- it was basically a tapped out operation.
21 It was a small play that was played. And unless
22 there was something else that attracted attention,
23 then it would probably be passed upon.

24 **Q. There were questions you were asked about**
25 **whether it was risky to take out bank loans.**

1 Do you remember those risk questions?

2 A. I do.

3 Q. Was it risky to lend to Molycorp once they
4 had in hand a DMEA certification of mineral
5 discovery?

6 A. That really impressed me because I looked
7 at that document and there was a big number. I
8 think it was 2 billion pounds of possible reserves.
9 And based on my experience in risk evaluation, one
10 of the key elements of risk is whether a resource is
11 there or not. And just the fact that someone with
12 credibility like the USGS or the DMEA loan people
13 saying, yes, there is a resource here and it is
14 significant would immediately lower that risk
15 premium that people subjectively put on any
16 investment.

17 Q. Particularly investments in minerals
18 exploration?

19 A. Yes.

20 MR. HOPSON: Let's look, Ms. Hutchman, at
21 US Exhibit 519.

22 Q. (By Mr. Hopson) And looking at the first
23 page here you will see this is a report to
24 stockholders of Molycorp for the year ended
25 December 31, 1955, correct?

1 A. Correct.

2 Q. And if you flip over a couple of pages you
3 see that this is actually issued on March 1, 1956,
4 correct?

5 A. Correct.

6 Q. Now, you were asked questions about this
7 document and particularly asked questions about the
8 balance sheet.

9 Do you recall that?

10 A. Yes.

11 MR. HOPSON: Let's go to Page 6.

12 Q. (By Mr. Hopson) This was a page you were
13 asked questions about.

14 Do you recall that?

15 A. I do.

16 Q. Now to start with this is a consolidated
17 balance sheet, correct?

18 A. Correct.

19 Q. So it includes not only the Questa Mine
20 but all of the rest of Molycorp's businesses,
21 correct?

22 A. That's correct.

23 Q. You were pointed to the line in the
24 balance sheet that said that Molycorp had at that
25 moment in time \$3.150 million in cash, correct?

1 A. Correct.

2 Q. Does that mean to you, Dr. Considine, that
3 Molycorp has \$3.1 million to invest in exploration
4 at the Questa Mine?

5 A. No, it doesn't.

6 MR. HOPSON: Let's flip to the next page.

7 Q. (By Mr. Hopson) Can you tell me,
8 Dr. Considine, what their current liabilities were
9 at the time they had \$3.1 million in cash?

10 A. About 3.7 million.

11 Q. So Molycorp wasn't exactly cash rich at
12 that moment in time?

13 A. No. In fact, in my report I compare rates
14 of return before and after the '56, '57 period and
15 it was a clear break in the trend. And, you know,
16 it is almost two-thirds lower after the depletion of
17 the Questa mine.

18 Q. I'm sorry, I probably just doesn't catch
19 that. What was two-thirds lower?

20 A. The return on assets.

21 Q. Okay.

22 MR. HOPSON: Ms. Hutchman, let's look at
23 US Exhibit 3.

24 Q. (By Mr. Hopson) Again, I am not going to
25 go through everything you were shown in this, but do

1 you recall looking at this SEC register statement
2 and being asked if the company had obtained
3 financing in 1954 and 1955?

4 A. Yes, I recall.

5 Q. And was that consolidated corporate
6 financing or was it specific to Questa?

7 A. I believe it was consolidated.

8 Q. And, again, back to your familiarity with
9 mine financing, is raising money for a consolidated
10 corporation a different process than raising money
11 specifically to explore for a mineral at a specific
12 cite?

13 A. Yes. There is a lot more exacting
14 information that is required for a specific site.

15 Q. What kind of exacting information, sir?

16 A. Oh, such as the location, the mineral, the
17 amount of mineral that could be recovered, estimated
18 costs, transportation infrastructure to the site,
19 et cetera.

20 Q. Just one question I want to ask you about
21 US Exhibit 481.

22 You were asked the question about the
23 statement that says to date a total of \$110 million
24 has been invested.

25 Let me ask you, do you know what time

1 period that refers to?

2 A. I do not.

3 Q. Is there anything else in this document
4 that indicates that?

5 A. I read it, I couldn't figure it out.

6 MR. HOPSON: We can put that document
7 aside.

8 Q (By Mr. Hopson) I want to talk a little bit
9 about the Attorney General's report to Congress
10 dated May 27, 1960, which is in evidence as
11 Chevron 105.

12 Are you familiar with that document,
13 Dr. Considine?

14 A. Yes, I am.

15 Q. To begin with, this is a report to
16 Congress by the Attorney General of the
17 United States that solely focused on the molybdenum
18 market and molybdenum industry, correct?

19 A. Correct.

20 Q. Does that suggest to you that the United
21 States Government believes that molybdenum is
22 important in 1960?

23 A. Yes. It is the Attorney General of the
24 United States picking out one material among many.
25 It is significant.

1 Q. Let's look -- I am having a hard time
2 reading the number at the bottom of the page, but I
3 believe it is Page 13 to 43, it is actually Page 10
4 in the original report.

5 You were asked quite a few questions about
6 whether there was molybdenum supply as a byproduct
7 of copper production.

8 Do you recall those?

9 A. Yes, I do.

10 Q. Can you look at Table Number 1 and tell us
11 generally the trend for byproduct production from
12 1950 through 1959?

13 A. From byproduct ore?

14 Q. Yes, by product ore.

15 A. Just eyeballing I don't see a trend, it is
16 up and down, rather zigzag pattern.

17 Q. Do you know whether there was a strike at
18 the Climax mine in 1958?

19 A. Yes, I did see an oblique mention of that.

20 Q. If you exclude 1958 do you see a trend?

21 A. Yes. Climax was increasing production
22 significantly.

23 MR. HOPSON: I would like to ask us to
24 turn to Page 31 in the original report, which I
25 believe is Page 34 of the document itself.

1 Q. (By Mr. Hopson) Now, you have read the
2 report before, correct?

3 A. Yes.

4 MR. HOPSON: In the middle paragraph, if
5 we could call that out.

6 Q. (By Mr. Hopson) The Attorney General
7 reports that in 1950, direct production came from
8 only two firms, one clearly dominant. Who are the
9 two firms?

10 A. Climax and Questa.

11 Q. And which is the dominant one?

12 A. Climax.

13 Q. You referenced, I don't know exactly how
14 you put it, but potential antitrust concerns,
15 competition concerns by having a dominant firm.

16 Do you recall that testimony?

17 A. I do.

18 Q. Look at the last sentence of that
19 paragraph, which reads, "But the existence of a
20 single primary producer of an important metal
21 necessarily occasions some uneasiness and doubts are
22 increased by concern for competition in associated
23 nonferrous metal production."

24 Does that statement by the Attorney
25 General relate to your expressed concern about a

1 **dominant role for Climax in the molybdenum market?**

2 A. Yes, it does, very much so. And this is
3 why I have mentioned in my testimony that one of the
4 motivations or considerations in the stockpile and
5 also the DMEA loan is this competitive balance in
6 the molybdenum market. And the need for the
7 Government and particular the steel firms who are
8 producing these vital materials for defense to have
9 a diversified source of supply and some sway over
10 the price, some negotiating power over the price as
11 opposed to being at the whims of a single producer.

12 **Q. And when we look at this market overall is**
13 **the byproduct supply a reliable or stable one as you**
14 **look at the market?**

15 A. No. I see that there are many other
16 factors that, besides the price of molybdenum, that
17 affects the source of byproduct molybdenum supply in
18 particular the price of copper and tungsten, that
19 may not necessarily move with molybdenum prices.

20 **Q. Okay. If we could turn back to Page 30 of**
21 **the report, which again appears to be Page 33 of the**
22 **exhibit. I just want to show you and you can look**
23 **at it in your binder if you want to, that the last**
24 **few pages of this report the Attorney General is**
25 **addressing competitive effects; is that correct?**

1 A. That's correct.

2 Q. He is noting both negative and potentially
3 positive competitive effects, correct?

4 A. Yes, yes.

5 MR. HOPSON: Could we turn to Page 32,
6 which is Page 35 of the exhibit, and could you
7 highlight the first complete sentence on that page.

8 Q. (By Mr. Hopson) Would you read that for
9 me, Dr. Considine?

10 A. "And when the Molybdenum Corporation of
11 America's mine exhausted its main ore resources,
12 defense production assistance was granted to enable
13 it to explore new ore sources."

14 Q. So the Attorney General believed that the
15 DMEA program enabled Molycorp to find new ore
16 sources?

17 A. Yes.

18 Q. And the Attorney General reported that as
19 a favorable development in the competitive market?

20 A. Yes.

21 Q. I am not going to pull out a lot of these
22 documents, but you were asked a number of questions
23 that to me sounded like they were suggesting that
24 molybdenum was not really that important.

25 Do you remember those questions?

1 A. Yes, yes.

2 Q. Was molybdenum on the stockpile list all
3 the way through 1970?

4 A. Yes, it was stockpiled and then there was
5 positive levels of the stockpile until 1975.

6 Q. Positive levels meaning molybdenum
7 remained in the stockpile?

8 A. Yeah. There was a stockpile of molybdenum
9 until 1975.

10 Q. And was Molycorp listed as a strategic
11 mineral critical for national defense throughout
12 that time period?

13 A. Yes, my understanding.

14 MR. HOPSON: If we could just call up the
15 front page of US Exhibit 81.

16 Q. (By Mr. Hopson) Do you recall looking at
17 this document with a bunch of questions suggesting
18 that there were plenty, there is plenty of
19 molybdenum around?

20 A. Yes.

21 Q. And what is the date of this stockpile
22 report?

23 A. January to June '56, 1956.

24 Q. We know something, though, about the
25 U.S.'s view about molybdenum because the U.S. went

1 forward with the DMEA contract at Questa Mine after
2 this report, right?

3 A. Correct.

4 MR. HOPSON: Let's look at Chevron
5 Exhibit 48, please.

6 Q. (By Mr. Hopson) This is, if you don't
7 recall, it is a collection of internal
8 correspondence and memoranda between and among
9 various Government officials.

10 Do you recall looking at this?

11 A. Not in detail, I just scanned it.

12 Q. Well, let me just call your attention to
13 Page 10 of 10 of the exhibit.

14 A. Okay.

15 Q. This is after the stockpile report, right?

16 A. Right, December 12, 1956.

17 Q. This is a memorandum from a fellow who is
18 a commodity specialist in the Branch of Ferrous
19 Metals and Ferroalloys to the Chief of the Rare and
20 Miscellaneous Metal Division in the DMEA, right?

21 A. Correct.

22 MR. HOPSON: And if you highlight the last
23 full paragraph, the full sentence.

24 Q. (By Mr. Hopson) It suggests what the
25 United States really thinks about the importance of

1 molybdenum at this point.

2 He states, "The strategic importance of
3 molybdenum and the limited noncommercial deposits
4 makes it highly desirable, in my opinion, to
5 endeavor to increase known reserves whenever
6 feasible."

7 Did I read that correctly?

8 A. You sure did.

9 Q. And was this desire to increase the supply
10 of molybdenum, and particularly to support a second
11 primary producer the reason the United States
12 entered into the DMEA contract?

13 A. It is probably an overarching
14 consideration in that decision, very important.

15 MR. HOPSON: I have no further questions,
16 Your Honor.

17 THE COURT: This witness can be excused.
18 (Whereupon, the witness was excused.)

19 THE COURT: Do we have one short witness,
20 maybe a 10-minute witness?

21 MR. TODD: I believe we do, Your Honor,
22 but may I deal with a couple of housekeeping matters
23 first just to explain where we are in the cadence of
24 the trial.

25 First, a couple of non-witness evidentiary

1 issues. We have referred a few times to the two
2 stipulations that were previously entered with the
3 Court's record on the Court's docket. Those are
4 Dockets 160 and 158.

5 As those are evidentiary stipulations, we
6 would like to move them into evidence as part of the
7 hearing record.

8 THE COURT: Okay. Any objections?

9 MS. KIMBALL: No objection.

10 THE COURT: Without objections they will
11 be so admitted.

12 (Exhibits admitted, Court's Docket 160 and
13 158.)

14 MR. TODD: Thank you, Your Honor.

15 Secondly, there was another stipulation
16 agreement between the parties that was not docketed
17 and that -- but it is memorialized in an e-mail and
18 that relates to the question of response costs. An
19 element of an allocation action as the party
20 bringing it has to prove that they have incurred at
21 least some response costs, i.e., clean-up costs.

22 And the Government has kindly agreed that
23 we can stipulate that Chevron has incurred some
24 costs without having to bring a witness in to
25 testify to all of that money.

1 So with the Government's agreement, I
2 would like to just make that clear on the record.

3 MS. KIMBALL: No objection.

4 THE COURT: Very good. So stipulated.

5 MR. TODD: Thank you, Your Honor.

6 Thirdly, in Docket Number 223, which is
7 when Chevron tendered its affirmative case to the
8 Court, we identified a number of discovery responses
9 that we wanted to offer.

10 As the Court knows a party's responses in
11 discovery are party admissions and admissible
12 without a witness. I was going to offer those, but
13 I understand from Ms. Kimball that the Government
14 wants to stand on some of the objections within
15 those responses. So rather than offer them now, I
16 would like to hold the record open so we can
17 hopefully resolve those and minimize what the Court
18 will have to look at.

19 THE COURT: Very good.

20 MR. TODD: Thank you, Your Honor.

21 With respect to witnesses, Your Honor,
22 Chevron has two more witnesses but neither of whom
23 we can call right now.

24 You may recall from the January status
25 conference that Bob Cryderman, who is an expert in

1 molybdenum couldn't be here in the early part of the
2 week because he was at an academic conference. We
3 hope he is coming tomorrow and we had agreed
4 previously he would testify Thursday. We will get
5 him on in the Government's -- as part of the
6 Government's case, our case, but in the middle of
7 their case once he is here.

8 And secondly, I mentioned Dr. Haddad whose
9 mother had the stroke. We just need to agree on a
10 date and a format for doing his cross-examination.
11 We can discuss that now, I am happy to discuss that
12 whenever Your Honor would like.

13 THE COURT: Yeah, without knowing his
14 particular status and I sort of know my status, like
15 I am gone next week. We will have to just wait and
16 see how it shakes out and we will make every effort
17 to accommodate both parties. I know you would like
18 to stay back east where it is more civilized than
19 out here.

20 MR. TODD: I would dispute that,
21 Your Honor. Dr. Haddad has great flexibility, he
22 simply doesn't want to leave Los Angeles while his
23 mother is in this condition. If we could do it
24 remotely he could probably do it any day, I
25 shouldn't say any, that's overreaching. Most days

1 when the Court could do it.

2 So perhaps if Your Honor identifies dates,
3 maybe put aside a half day. I am not sure it would
4 even take that long. If you give us dates, then we
5 could work around those.

6 THE COURT: So you assume that we will
7 Zoom him?

8 MR. TODD: If you are willing to do Zoom
9 and I know the Government would prefer to do it in
10 person.

11 THE COURT: Yeah, I am willing. We can do
12 it from Santa Fe, too.

13 MR. AUGUSTINI: May I be heard briefly,
14 Your Honor, if you are done, Counsel?

15 MR. TODD: Please.

16 MR. AUGUSTINI: Yes, Your Honor. Our
17 strong preference is to conduct live
18 cross-examination. I am happy to come back to
19 New Mexico, to Santa Fe if it is convenient for you.
20 We will accommodate Dr. Haddad's schedule, obviously
21 we understand their personal circumstances.

22 So in terms of agreeing on a date, we will
23 work with Chevron on that, but we do prefer live
24 cross-examination. We just think it is just better
25 overall.

1 THE COURT: It probably is.

2 MR. AUGUSTINI: Thank you, Your Honor.

3 MR. TODD: I am sure we are all happy to
4 do it in Santa Fe. Your Honor, honestly, if we were
5 thinking, we would have done this whole trial in
6 Santa Fe. I apologize on behalf of both parties for
7 not suggesting that.

8 THE COURT: That is all right.

9 MR. TODD: The last issue, Your Honor, a
10 moment of personal privilege, we are now going to
11 hand the case over to the Government to call their
12 first witness, Ms. Sitton, who I believe we can get
13 up and down very quickly today.

14 But before I do that any efficient
15 courtroom presentation doesn't rely on the folks at
16 the podium, it is the folks in the back doing the
17 work. I just wanted to introduce on the record
18 Alexia Jansen, Matt Simpson and Deesha Shah, a
19 couple of associates and a paralegal with my firm
20 who have put in some tireless nights here.

21 THE COURT: Welcome.

22 MR. TODD: Thank you, Your Honor.

23 THE COURT: Now it is 4:00. Do you really
24 need to put this witness on today?

25 MR. AUGUSTINI: No, actually I am afraid

1 that we would interrupt your trip back to Santa Fe
2 if we tried to, and I don't know how much cross
3 Chevron has but, I may have some redirect. So we
4 are happy to start first thing in the morning,
5 whatever time the Court prefers.

6 THE COURT: I would prefer to do that if
7 it is not a big inconvenience.

8 MR. AUGUSTINI: Whatever time Your Honor
9 would like. We are happy to start earlier.

10 THE COURT: We can start at 9:00.
11 Tomorrow I have got a sentencing at 4:00 in another
12 courtroom and on another case. Not one of you
13 people, so we will be in recess, then, until 9:00
14 tomorrow morning.

15 Thank you.

16 (Proceedings concluded at 3:58 p.m.)

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REPORTER'S CERTIFICATE

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. I further certify that the transcript fees and format comply with those prescribed by the Court and the Judicial Conference of the United States.

Date: March 15, 2022

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